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An Oral Narrative Intervention for Second Graders with Poor Oral Narrative Ability

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An Oral Narrative Intervention for Second Graders with Poor Oral Narrative Ability

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Abstract: This study examined the effects of a narrative intervention for second graders with poor narrative ability. Second graders in one school were screened for narrative ability and 36 students with poor oral narrative skills were randomly assigned to an intervention or comparison group (no narrative instruction). The intervention group participated in 22, 30-minute small group narrative instruction sessions for 8 weeks. Intervention focused on macrostructure and microstructure aspects of narrative.

Before and after the 8-week intervention, students in both groups were evaluated by the Test of Narrative Language (Gillam & Pearson, 2004), a measure of narrative production and narrative comprehension. In addition, students were given a researcher-developed measure that assessed knowledge of specific words encountered in intervention materials. Narratives were also analyzed with respect to microstructure and macrostructure elements.

Three separate Analyses of Covariance (ANCOVA) were conducted using the following dependent variables with each pretest score used as a covariate: (1) the

narrative comprehension subtest of the Test of Narrative Language (TNL), (2) the oral narration subtest of the TNL, and (3) a researcher-developed vocabulary test. Practical significance effect size results indicated that there was a statistically significant intervention/comparison group difference effect on oral narration ability (effect size = 1.45) and specific vocabulary knowledge (effect size = 1.32); however, there was no significant difference between group posttest scores on the narrative comprehension subtest (effect size = .19). In addition, English language learners in the intervention group (n = 3) performed similarly to their peers.

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CHAPTER 1

INTRODUCTION

The emphasis on school accountability for student achievement in recent initiatives such as the No Child Left Behind Act (NCLB, 2002) has mandated that school professionals adopt scientifically based practice in instructing children who are at risk for academic failure. Although the accumulated research in reading has led to guidelines for effective reading instruction (NIHCD, 2000), the empirical evidence for effective language intervention and universal screening measures to identify children early with language difficulties are lacking. Without effective screening tools and intervention methods, children at risk for language impairment may be overlooked, particularly if they have poor listening comprehension skills but no outward sign of articulation or expressive language difficulties (Nation, Clarke, Marshall & Durand, 2004). It is imperative that scientifically based practices in speech-language intervention be discerned. Specific instruction on oral narratives is commonly addressed by speech-language pathologists. The purpose of this study is to expand the research base on effective instruction for children with poor narrative skills by investigating the effects of a second grade narrative intervention.

Importance of Narrative

One area of difficulty in children with language learning disorders (LLD) is the ability to tell both personal and fictional narratives (e.g., Bliss & St. Pierre, 1997; Gillam & Johnston, 1992; Graybeal, 1981; Liles, Duffy, Merritt & Purcell, 1995). The concept of a "narrative" is often defined by its function. A personal narrative has been described as a representation of a series of past events by a verbal sequence of clauses (Labov, 1978). Other functions of narratives are to instruct, to understand and reconstruct one's own experiences, and to entertain others (Stein & Policastro, 1984). Within the school setting, narrative retelling activities are commonly used to demonstrate learning and comprehension. Narratives have also been defined by their structure or their inclusion of specific story grammar components (Peterson & McCabe, 1983). In their story grammar model, Stein and Glenn (1979) describe the episodic structure of the prototypical story as having six main components in the following order: the setting, the initiating event, the internal response, the attempt, the consequence, and the reaction.

In addition to form and function, narratives are distinguished from other types of discourse in that they convey aspects of one's personality and identity. In their analyses of over a 1000 children's narratives, Peterson and McCabe (1983) concluded that narratives were much more than a temporal sequencing of events: "One sees their [children's] humor, psychological insight, intelligence, and virtuosity with language – all wrapped up in their narratives" (p. 206-207). Good narrative ability allows a child not only to express important past events but also to describe reactions and feelings regarding those events, thereby revealing much about his or her personality.

Narrative discourse represents a large percentage of child communication in the form of the telling of jokes, sharing of past experiences and justifying past actions and there is evidence that children with poor language skills have more difficulty engaging in peer interactions and are less accepted by their peers (Fujiki, Brinton, Hart & Fitzgerald, 1999; Liiva & Cleave, 2005). Personal narratives are not only important for establishing peer relationships but also feature prominently in classroom activities such as sharing time or circle time (Cazden, 2001). The ability to understand, recall and retell stories is crucial in a school setting where information is often provided in large chunks and children are required to retain the "gist" of what is said (Graybeal, 1981).

Narrative Ability and Literacy

Narrative skills have been described as the bridge between oral language and literacy as the child uses more decontextualized and abstract language (Westby, 1991). Like print, the content of narrative is usually unsupported by cues in the environment. The prosody of oral narrative also resembles that of printed text, with fewer pauses, repetitions and false starts. Oral narratives form the basis for written stories and children who perform poorly on narrative tasks in the early grades are at risk for poorer academic and reading performance in later grades (Catts, Fey, Zhang & Tomblin, 1999; Fey, Catts, Proctor-Williams, Tomblin & Zhang, 2004). A study Spanish-English bilingual speakers found that narrative skills in both languages are predictive of reading skills in both Spanish and English (Miller et al., 2006). Cain (2003) examined the narrative abilities of children with poor text comprehension as compared with their age-matched peers and found that the children with poorer reading comprehension skills produced stories with

fewer integrated event structures and connectives. Children with poor narrative skills also have difficulties with reading comprehension (Cain & Oakhill, 1996). It is unclear whether poor narrative ability *results* in poor text comprehension or if these two deficits have the same underlying cause.

The recognized importance of narrative ability by speech-language researchers is evidenced by the numerous articles on narrative ability by children with language disorders. A search of the literature between 1980 and 2006 revealed over 20 studies describing narrative abilities of monolingual English speaking children (kindergarten-6th grade) with LLD. Researchers have examined different aspects of narrative ability in children with LDD for the purpose of describing how narrative ability in children with language impairment differs from that of their peers and for the purpose of differential diagnosis.

In comparison to their age-matched peers, children with LLD produce stories with: (a) fewer critical elements (Graybeal, 1981; Scott & Windsor, 2000), (b) fewer story grammar components (Bliss & St. Pierre, 1997; Merritt & Liles, 1987), (c) shorter clause length within episodes (Merritt & Liles, 1989), and (d) less grammatically complex sentence structures (Gillam & Johnston, 1992). In addition, their stories are less cohesive (Liles, 1985, 1987), and have poorer overall quality (Gillam & McFadden, 1996; Newman & McGregor, 2006; Ukrainetz & Gillam, 2006). In telling their stories, children with LLD also have difficulty adapting to the needs of the listener (poorer referencing skills) (Liles, 1987; Sleight & Prinz, 1985) and repairing communication breakdowns (Purcell & Liles, 1992).

Given the prevalence of narrative difficulties in children with LLD, it is not surprising that narrative assessment and narrative intervention procedures are commonly recommended in graduate level and practitioner books on language intervention (Cole & Cole, 1989; Merritt & Culatta, 1998; Ukrainetz, 2006a). Although the strategies are varied, a few common principles for narrative intervention discussed in the literature include: relating the narrative instruction to specific classroom content and tasks, teaching story macrostructure in a series of scaffolded steps and teaching specific language components (syntax, vocabulary) through the use of stories.

The rationale for teaching students with LLD to tell better stories is based upon the logic that good narrative ability is valuable for children's social and academic competence. In addition, there is evidence that narrative difficulties do not resolve without specific instruction and that children with LLD continue to experience problems in later grades with oral and written narratives (Fey et al., 2004; Manhardt & Rescorla, 2002; Scott & Windsor, 2000). Certain recommended narrative teaching strategies such as scaffolding and modeling (Merritt & Culatta, 1998) are supported by basic principles of language intervention but there is an absence of empirical research on the effectiveness of narrative instruction. Given the need for empirically validated instruction, it is important to determine the most efficient and effective methods of providing educationally relevant narrative instruction to children with poor narrative skills.

There have been four quasi-experimental intervention studies and one case study for improving narrative skills in children with LLD that will be discussed in detail in the next section (Davies, Shanks & Davies, 2004; Gillam, McFadden & VanKleeck, 1995;

Hayward & Schneider, 2000; Klecan-Aker, 1993; Swanson, Fey, Mills & Hood, 2006). However, there have been no narrative intervention studies for children with LLD that have used random assignment of participants allowing for more certainty of causal inferences.

Narrative intervention studies with students with LD and low-achieving students without diagnoses of language impairment have focused on improving story knowledge for the purpose of increasing storytelling ability (Fitzgerald & Spiegel, 1983; Klecan-Aker, Flahive & Fleming, 1997) as well as for the purpose of increasing reading comprehension (Carnine & Kinder, 1985; Dimino, Gersten, Carnine & Blake, 1990; Gurney, Gersten, Dimino & Carnine, 1990; Idol, 1987; Short & Ryan, 1984; Singer & Donlan, 1982). Two studies targeting storytelling ability used random assignment of participants in repeated measures designs (Fitzgerald & Spiegel, 1983; Klecan-Aker et al., 1997). Both studies indicated improved performance on overall narrative ability and Fizgerald and Spiegel (1983) also found effects on narrative comprehension.

Rather than providing narrative intervention to children previously identified with language impairment or learning disability, this study seeks to identify those *at risk* for poor narrative ability and deliver intensive and focused instruction to prevent future language, reading and academic failure. By screening for a specific language skill, this study also provides specific instruction for a particular skill rather than applying a broader instruction for a variety of students.

Statement of Purpose

The purpose of this study is to expand the research base on effective instruction for children with poor oral narrative ability by comparing the relative effects of a small group, eight-week narrative intervention to a comparison condition by examining oral narrative outcomes for second graders with weaknesses in narrative ability.

Research Questions

The following primary and secondary research questions guided this study:

Primary

1. What are the relative effects of a small group narrative instruction compared with a comparison group receiving no specialized small group instruction on students' outcomes on oral narrative ability?
2. What are the relative effects of a small group narrative instruction compared with a comparison group receiving no specialized small group instruction on students' outcomes on narrative comprehension?

Secondary

3. What are the relative effects of a small group narrative instruction compared with a comparison group receiving no specialized small group instruction on students' knowledge of story specific vocabulary words (words encountered in story books used for narrative instruction).

CHAPTER 2

REVIEW OF LITERATURE

In this chapter the research on narrative development in children with typical language and those with language impairments and learning disabilities will be presented to guide the instructional framework and components for this study. In addition, factors that may influence narrative production such as cultural and linguistic background will be discussed. This research as well as the results of narrative intervention studies will be summarized to provide a background and rationale for assessment and intervention procedures for the current study.

Narrative Development

Macrostructure. Stein and Glenn's (1979) story grammar model has been used most often in describing narrative structures of children with typical language and of those with language impairments (Hedberg & Westby, 1993). Stein and Glenn identified six story grammar components: setting, initiating event, reactions and attempts, consequences, resolution and ending. The setting always occurs at the beginning of a story and refers to the time and place of a story and the introduction of the main characters. The initiating event is the change of action or state that causes a problem for the characters. This change can be a natural occurrence (e.g., change in the physical environment), an action caused by a character, or an internal event (e.g., change in a character's perception or physiological state). The initiating event causes a character to

respond or react and leads to the fourth component, the consequence. The consequence refers to the character's success or failure in achieving a goal. A reaction to the consequence describes the character's feelings or actions in relation to the consequence. The ending indicates the completion of a story frequently provides an overall summary or moral.

A child's development of story grammar proceeds through a hierarchy of stages or levels. Stein and Glenn (1979) identified eight levels of narrative development: isolated description, descriptive sequence, action sequence, reactive sequence, abbreviated episode, complete episode, complex episode and embedded episode. Using Stein and Glenn's model of narrative development, Peterson and McCabe (1983) examined personal narratives of 96 white working class children of ages 3 to 9 and found that younger children were more likely to produce descriptive and action sequences than older children. Descriptive and action sequences are statements without apparent causal relations. The following is an example of an action sequence of a 4-year-old girl in the Peterson and McCabe study: "I just said, I, I said, 'Hi, hello, and how are you?' And then, they go to someplace else and then, and then I had a party, with, with, with, with candy and…hmm..my, and my, um I don't know" (p. 72). Preschoolers are able to discuss actions in temporal sequence but do not often provide causal relationships between actions.

The next stage is the reactive sequence in which events begin to be chained and causally related. The following is an example of a reactive sequence in which one event leads to another in a description of a car accident: "There was three kids in there.

Everybody go out in, just in time, and, and, and then, my Dad didn't keep his eyes on the road and we were almost wrecked" (Peterson & McCabe, 1983, p. 73).

Abbreviated episodes are the next step and emerge in early elementary school. An abbreviated episode contains an initiating event and internal response and characters that engage in a cause-effect sequence of actions. The following is an example of an abbreviated episode with an initiating event (getting hit by a friend) and a specified internal response and eventual consequence (her friend got a spanking): "…And he hit me, you know, I was in back of him and he hit me, and before I got in the house, it was bleeding so hard. Way down to my legs….Well, Scotty, you know, he got a spanking." (Peterson and McCabe, 1983, p. 74-75).

A complete episode describes the characters' emotions and perspectives. At minimum, a complete episode has an initiating event, internal response, attempts and a consequence. Peterson and McCabe (1983) reported that the number of narratives with complete episodes gradually increased from the ages of 4 through 9 with a total of 68% of narratives as complete episodes for their participants aged 8 and 9. Stein (1988) also compared the narratives of children in kindergarten, third grade and fifth grade and found that older children told more goal-based stories that included more obstacles in more tightly connected episodes. Thus, narratives in later elementary school become more sophisticated in their inclusion of obstacles and multiple attempts for the characters to reach goals. These complex episodes also reflect the child's maturing meta-linguistic skills in describing characters' planning in terms of deception or trickery. The last stage, embedded episode, refers to stories with two or more episodes (Stein & Glenn, 1979).

Microstructure. The microstructure of a narrative refers to the linguistic elements that influence the underlying network and sequence of ideas: use of cohesive ties, number of elaborated noun phrases, use of correct verb tense, total number of T-units, mean length of T-units and number of different words. A T-unit is one main clause and its subordinate clauses (Hunt, 1965, 1970). A cohesive tie is a pair of words that have a relation and provide cohesion across sentence boundaries through oral narrative. Halliday and Hasan (1976) described five types of cohesive ties: reference, conjunction, substitution, lexical and ellipsis. A pronominal reference is the use of a pronoun in place of a previously mentioned noun (e.g., "The dog is in the room. *He* is about to eat dinner."). A conjunction links two sentences or ideas together (e.g., "The dog is hungry. *But* there is no food."). A substitution replaces a noun mentioned in a previous sentence (e.g., "The dog chased the bees. But he didn't catch *one.*"). Lexical ties indicate a semantic relationship between two different nouns (e.g., "The dog wanted to go for a walk. The boy found the dog's *leash.*") and an ellipsis is the omission of words previously noted in text (e.g., "The dog thought that the boy had a bone. But the boy *didn't.*").

The use of cohesive devices begins with stories of 2-year-olds with the repeated reference to characters, objects, and actions. Published research on the exact development of cohesive ties in the school-aged years is limited. Much of the research on cohesion comes from studies comparing narratives of children with typical language to those of children with language impairment. Liles (1985) found that in stories of children with and without language disorders (7-10 years old), pronominal references ties and conjunctions were used more often than more subtle cohesive ties such as ellipses. In

her study, Liles also found that over 81% of the cohesive ties in narratives of typically developing participants were judged complete whereas only 61% of narratives of participants with language disorders were found to be complete. An tie is judged as incomplete if the information suggested by the cohesive marker was not previously provided in the text. An example of an incomplete tie would be the following sentence at the beginning of the story: "She decided to visit her grandmother." In this example, the information to identify "she" is not available from previous sentences that include important background information (e.g., "Once there was a girl named Little Red Riding Hood"). Hedberg and Westby (1993) summarized the findings on the use of cohesive ties in development and concluded that the use of cohesive devices continues to increase through the middle elementary years and then appears to plateau. Children of ages two to twelve use reference and lexical ties more frequently than other cohesive ties and errors in reference ties occur most frequently.

The divisions of macrostructure, microstructure and quality are often separated for the purpose of analyzing each more closely. However, they are not unrelated and it is important to consider how all three influence each other. Peterson and McCabe (1991) analyzed over 1,100 personal narratives of children between the ages of three and nine-years old to determine the relationship between the use of cohesive devices and story macrostructure. They found that the connectives (e.g., so, because, but, then, and) were used to marked components of story macrostructure. For example, the connectives "and" and "then" were used to link temporal events in a sequence (e.g., "We rode down around the pasture and we then Little Man stopped and then I saw a rattlesnake."). The causal connectives "because" and "so" were used less frequently and indicated a character's

intentions or psychological state (Scott, 1988). Hudson and Shapiro (1991) suggested that a child's understanding of the overall macrostructure of a story can assist the child in focusing on the linguistic cohesion, or local integration of a story. Likewise, a child's use of cohesive devices can enhance the organization of the story.

Grammatical complexity and the use of more sophisticated cohesive devices also influence the perceived *quality* of a story. A sample transcript from a study of narratives of 9-year-old children with expressive language delay and their typically developing peers illustrates this relationship (Manhardt & Rescorla, 2002). In the following excerpt, a 9-year-old with typically developing language employs relatively sophisticated syntax to retell the story of *Frog, Where Are You?* (Mayer, 1969): "And so the boy went to sleep with the dog curled up on him. But little did they know this frog knew how to walk and wandered off. In the morning, they both woke up to discover that their tiny green friend had disappeared." In contrast, the next example illustrates how simple grammar and the absence of internal perceptions results in a less interesting story: "And then he falls asleep. And the frog is gone. And then the boy is like 'uhoh!' His frog has escaped" (Manhardt & Rescorla, 2002, pp. 15-16). Each example narrative has the same sequence of events but with varying quality.

Narrative Abilities in Children with Language Learning Disabilities

Because of the complexity of the storytelling task, children with LLD demonstrate multiple areas of weakness in narrative ability. Their narratives have been found to be less cohesive, contain fewer complete episodes, include less content and have shorter and less complex sentences than stories of their age-matched peers (Merritt & Culatta, 1998).

Liles et al. (1995) reported two factors, "macrostructure" and "linguistic structure," from a factor analysis on narratives from several studies examining the influence of multiple variables on narrative abilities in children with LLD. Performance on "linguistic structure" variables, including the frequency and length of subordinate clauses, cohesion and the use of grammatical utterances, was more effective in distinguishing children with and without language disorders. Thus, they concluded that narrative deficits in children with LLD were affected more by linguistic, or microstructure, variables than by difficulties with episode organization and use. Studies on the narrative abilities of children with LD often focus on either macrostructure or microstructure aspects of narrative.

Macrostructure. Studies examining use of story structure have found that children with LLD have a knowledge of basic story structure but are not able to use it as effectively as those with typical language development (Bliss & St. Pierre, 1997; Graybeal, 1981; Merritt & Liles, 1987). Stories of children with LLD include fewer story grammar components (Bliss & St. Pierre, 1997; Merritt & Liles, 1987), fewer critical elements (Graybeal, 1981; Scott & Windsor, 2000) and have poorer episode organization (Liles, 1987) than those of their age-matched peers. In an attempt to identify the source of poor story structure in story retelling tasks, Merritt and Liles (1987) probed the children's knowledge of causal relationships of stories through comprehension questions. They found that children with language impairment had a less complete understanding of the relationships between story parts, suggesting that comprehension hindered recall. Graybeal (1981) concluded that poor recall may be the result of a poor

memory processing while Bishop and Donlan (2005) related recall ability to knowledge of complex syntax and/or a deficit in non-verbal causal reasoning.

Syntax. Studies of syntax in narrative samples have found that children with LLD produce less grammatically complex sentence structures (Gillam & Johnston, 1992; Norbury & Bishop, 2003; Scott & Windsor, 2000) and more grammatical errors than their age-matched peers (Scott & Windsor, 2000). Some studies have analyzed the type of sentence structures that differentiated children with LLD from their peers. Greenhalgh and Strong (2001) found that children with LLD used fewer conjunctions (coordinating, subordinating and intersentential) and elaborated noun phrases than their age-matched peers.

Length. Story length differences between children with LLD and control groups vary with respect to the narrative elicitation task. During story retell or recall activities, children with LLD tell shorter stories than children with typical language (Bishop & Donlan, 2005; Graybeal, 1981). However in a study of spontaneously generated stories, researchers found that the length of stories of children with LLD did not differ from those of age-matched peers and was affected by the inclusion of irrelevant and extraneous information (Bliss and St. Pierre, 1997). The difference in performance between recall and spontaneous story tasks may result from the difference in language demands. In a recall task, a child is required to remember the story, form inferences while recalling the story, use specific vocabulary and connectives as well as use complex syntax to form narrative coherence.

Quality. Story "quality" includes story elements that cannot be easily quantified by analyses of story microstructure and macrostructure. Gillam and McFadden (1996) asked a team of teachers to examine story quality by rating spoken and written stories of students with language disorders and their age-matched and reading-matched peers. The scale consisted of four categories: weak, adequate, good and strong. The authors found that children with language disorders had lower quality scores than their age-matched peers. However, their scores did not differ significantly from narrative scores of the reading-matched and language-matched groups. Overall quality of narratives was associated with textual level (e.g., number of T-units, connectives, number of plot units per story, number of problem-resolutions pairs) rather than sentential level (e.g., morphemes per T-unit, percentage of grammatically acceptable complex T-units) performance.

In a recent study, Ukrainetz and Gillam (2006) examined the expressive elaboration of stories of children with Specific Language Impairment (SLI) as compared to those of children with typical language. They quantified expressive elaboration into 14 categories based upon Labov's high-point analysis (1972). Simple categories included: introducer ("Once upon a time…"; "Guess what?"), title, ender, characters' names, characters' relations and repetition for emphasis (e.g., "Very, *very* scary). More sophisticated elements included an abstract (e.g., "This is a story about three little pigs who try to build a house."), theme (e.g., "Their houses kept falling down."), coda (e.g., "And the pigs learned that they need to build out of brick."), external conditions, personality (e.g., "The last pig was smart."), modifiers (e.g., "He built the house

quickly."), phrases and expressions, internal state, and direct dialogue. Results indicated that the children with SLI scored lower on expressive elaboration than their age-matched peers at both age levels.

Manhardt and Rescorla (2002) examined story quality by analyzing stories for the presence of six evaluative devices as identified by Bamberg and Damrad-Frye (1991). These included: characters' emotions, characters' cognitions, characters' direct and indirect speech, hedges ("seemingly" "probably"), negative qualifiers (e.g., no, not, -un) and causal connectives. The authors summed the number of evaluative devices by 9-year-olds with typical language development and those with delayed language. Narratives produced by participants with delayed language contained significantly fewer evaluative devices.

Even individuals who are not as familiar with school-based story use or story instruction are sensitive to story quality and can easily distinguish good stories from poor stories. Newman and McGregor (2006) compared teachers' and laypersons' ratings of stories of children with SLI to those with normal development (ND) to examine the functional impact of SLI. "Laypersons" included parents of children who were not educators. Using an interval scaling measure to rate stories, teachers and laypersons distinguished the stories of the SLI group from those of the ND group by rating them lower. After the rating procedure, all adult raters were questioned on the story aspects that they considered most important in their story quality ratings: vocabulary, story grammar, syntax, fluency/articulation or sparkle. Both groups reported that they attended to vocabulary and story grammar more than sparkle in making their judgments; however,

laypersons also considered story sparkle, or the degree to which the story engages, interests and charms the listener in forming their evaluations. These results suggest that storytelling ability can have functional consequences outside of the educational setting and that story sparkle or charm should be considered in evaluation and intervention for narrative ability.

Cohesion. The use of cohesive ties (Liles, 1985, 1987; Strong & Shaver, 1991) and cohesion repairs (Purcell & Liles, 1992) within oral narratives of children with LLD has also been examined. Liles (1985) investigated the use of cohesive conjunctives in narratives by children with language disorders and found that they had a lower frequency of accurate conjunctives across story episodes than stories of age-matched controls. Similarly, Purcell and Liles (1992) examined the presence of cohesive repairs in narratives of children with LLD and found that their repairs were less successful than those of their age-matched peers. Strong and Shaver (1991) measured several aspects of cohesion use in their study including: cohesive density, types of cohesive ties, and cohesion adequacy and found that the scores of children with LLD across these measures was lower than that of the comparison group.

Adaptation to the listener. In telling their stories, children with LLD appear to recognize the need to adapt their stories to an unfamiliar listener but have difficulty repairing communication breakdowns (Purcell & Liles, 1992) and adjusting their stories to meet the listener's level of knowledge (Liles, 1987; Sleight & Prinz, 1985). Liles (1985) found that children with LLD attempted strategies to help an unfamiliar listener such as providing more complete cohesive ties. However, in a later study, Liles (1987)

found that participants with LLD did *not* vary the number of incomplete or complete story episodes with respect to the listener's familiarity with the story. Purcell and Liles (1992) found that children with LLD monitored their narrative discourse to repair communication breakdowns, but their repairs were less successful than those of age-matched peers.

Lexical diversity. Two studies examined lexical diversity and found that groups did not differ with respect to the lexical diversity measure used (Greenhalgh & Strong, 2001; Scott & Windsor, 2000). This result may be reflect the validity of the lexical diversity measure (Number of Different Words) rather than the actual lexical content of the narratives.

Summary

The narrative performance of children with LLD indicates a knowledge of basic story structure but weaknesses in providing a complete story structure, recalling important details, story quality, cohesion, syntactic complexity, story length and adapting to listener's needs. Broadly, the narrative performance of children with LLD suggests a general capacity deficit in producing narratives. When telling a story, children with LLD are able to do the things that their age-matched peers are able to do (use cohesive ties, use basic story structure, recall events in the story, monitor their discourse) but they do them less well.

Narrative Abilities in Children with Learning Disabilities

Children with learning disabilities (LD) show similar patterns of narrative weakness as children with LLD. This is not surprising given that poor readers often have a history of oral language difficulties (Catts et al., 1999; Fey et al., 2004). Their stories include fewer story components (e.g., internal responses, setting) (Montague, Maddux & Dereshiwsky, 1990), are less complex (Levi, Musatti, Piredda & Sechi, 1984), are shorter in length and have more incomplete episodes (Roth & Spekman, 1986). Microstructure weaknesses include the use of fewer complex sentences and the use of fewer pronouns with clear references than their age-matched peers (Feagans and Short, 1984). Roth and Spekman also found that students with LD placed an extra burden on the listeners by providing incomplete information about cause and effect relationships. These omissions suggest a deficit in perspective taking in which the student with LD is unable to identify the information that the listener requires to understand the story.

Difficulties with storytelling in children with LD have been attributed to poor story schema knowledge (Montague et al., 1990), poor organizational skills and reduced level of narrative comprehension (Roth, 1986). These areas of deficit are interrelated as story schema knowledge may in turn affect a child's organization and comprehension. Many studies examining narrative ability in students with LD include older participants (e.g., upper elementary, middle and high school) than those included in studies of children with language difficulties (Levi et al., 1984; Montague et al., 1990; Newcomer, Barenbaum & Nodine, 1988). The age of the participants suggests that narrative difficulties, even deficits in basic deficits in simple storytelling, do not resolve with age.

Other Variations in Narrative Production

A child's success or failure with a narrative task may depend not only on his or her language or learning ability but also on cultural experience with stories, background knowledge and the ability to adapt to the narrative demands of the classroom (Cazden, 2001; Heath, 1983; Michaels, 1981). Children come to school with a variety of cultural and literacy experiences that affect their ability to recall and produce narratives that are typical of classroom instruction. Cultural variations in narrative structure influence the way children remember and retell a story that they have heard (Kintsch & Greene, 1978; McCabe & Bliss, 2003). For example, Bloome, Katz and Champion (2003) examined narratives of African-American preschool and kindergarten children and found that children produced two different narrative styles: narratives as text and narratives as performance. Narratives as performance may not follow typical narrative structure but instead, seek to incorporate audience engagement. Within the school setting, the opportunities for narrative performance are few and focus is on narratives as text. This mismatch in expectations of the role of narrative can cause confusion and frustration among children who have different cultural traditions in storytelling (Bloome et al., 2003; Cazden, 1983).

Linguistic background may also affect storytelling. In a study comparing the Spanish and English narratives of bilingual children between the ages of 4 and 6, Fiestas and Peña (2004) found that narratives in both languages were equally complex during a wordless picture book task. These findings confirmed results of a previous study that found that Spanish and English narratives of bilingual children were almost identical

(McCabe & Bliss, 2003). Despite these similarities, bilingual children may include different story components within stories that they tell in difference languages. For example, Fiestas and Peña found that the bilingual students in their study were more likely to include initiating events and attempts in their Spanish stories whereas they were more likely to include a consequence in English stories. They suggested that these differences resulted from school-based demands of including specific elements in English. Although narratives in different languages may differ in some structural aspects, there is evidence that bilingual children's narrative deficits are not different from the deficits of monolingual children in their native language (Gutiérrez-Clellen, 2004). For accurate assessment of narrative ability and language disorders among bilingual children, Guitiérrez-Clellen and Quinn (1993) and Peña et al. (2006) propose a dynamic assessment approach that focuses on assessing the child's skills across a variety of different narrative contexts.

There is evidence that children who come from diverse socio-economic backgrounds may have different narrative skills. Although there has been very little research regarding *narrative* development with regard to social class, there is much research on *conversation* development in children of poverty. Children in poverty have been found to use more nonverbal cues in communication and have more difficulty with abstract concepts, answering questions, providing sufficient information for the listener (Feagans, 1982). One reason offered for these weaknesses is the limited number of opportunities to engage in active dialogue with adults and increased peer interaction. Stack (1974) hypothesized that opportunities for conversation with adults do exist but

they are often shorter interactions due to the increased number of people in the environment and lack of physical space.

Variability in narratives also results from the variety of *types* of narratives and the contexts in which they are told. Preece (1986) studied the narratives of three typically developing children and identified 14 narrative types that occurred in social situations between peers. Narratives that related personal experiences, or personal anecdotes, made the largest proportion of narratives (52%). Other types that she identified included: "tattle-tales," "retellings," "original fantasies," and "jokes." Hudson and Shapiro (1991) studied the effect of task and topic on narrative structure and found that children produced more structural elements and cohesive ties in narratives about topics that were routine, causally organized and familiar (e.g., going to the doctor's office). These narrative differences provide further support that narrative assessment should include a variety of narrative types.

Narrative Intervention for Children with Language Learning Disorders

Whereas descriptive studies can inform assessment procedures and predict potential areas of narrative weaknesses of children with LLD, previous narrative intervention studies are useful in identifying exact methods that have been effective in assisting children with narrative difficulties (Davies et al., 2004; Gillam et al., 1995; Hayward & Schneider, 2000; Klecan-Aker, 1993; Swanson et al., 2005). Given the complexity of the narrative task and the variety of narrative deficits shown by children with LLD, it follows that these narrative interventions have focused on different targets

and have employed diverse methods of instruction. The most common area for intervention has been on improving narrative macrostructure. Details of these studies are presented in table format Appendix A.

Interventions for narrative macrostructure. Interventions have varied with respect to the level of explicitness in teaching macrostructure. For example, Swanson et al. (2005) used a combination of story retelling practice, story co-construction opportunities and question prompts to assist the 7 to 8-year-old children with SLI to include the major aspects of story structure during story generation and retelling tasks. Activities targeting narrative production were formulated specifically for individual children. For example, a child who consistently omitted the setting or character names was encouraged to use these components by question prompts. Results indicated that students improved performance on a narrative quality measure that assessed the inclusion of story components as well as the use of complex language.

Retelling practice, modeling and prompts were also employed in a narrative intervention study by Gillam et al. (1995). Participants included 8 children with language disorders (mean age = 10;10). Four children completed language skill activities (e.g., workbooks, answering multiple choice questions about a passage etc.), and four children participated in "whole language" intervention that included book discussion activities that emphasized story structure and story generation tasks that allowed them to use story structure in new contexts. Posttest results indicated improvement on inclusion of story episodes for the "whole language" group.

More explicit story component instruction was used by Davies et al. (2004) and Hayward and Schneider (2000). Davies et al. (2004) used questioning and story retelling activities to help the children (age 5-7) with language delays recognize story structure. To make the story structure even more obvious, the researchers used puppets and cue cards (e.g., "Who, What, Where etc.) to prompt the children to include certain story elements. Participants improved on measurements of story macrostructure. Hayward and Schneider (2000) also used cue cards to help preschool children with language impairments to identify story components. Intervention activities required children to identify missing story components, reformulate scrambled stories and sort story components to reinforce story grammar knowledge. Most of the participants showed improvements on their inclusion of story components and their complexity of stories.

The most explicit story component instruction was used in a case study of a second grade student with a language disorder (Klecan-Aker, 1993). The author explained to the student that "telling stories was like baking a cake" and that one needed to put in certain ingredients in the correct order (p. 109). She described the components such as initiating event, attempts, consequences in language that the student could understand and then provided several examples of each component. Definitions of story grammar components were reviewed at the beginning and end of each session. Posttest results indicated that the child improved on story grammar complexity measures as well as story length (in T-units).

These five intervention studies addressed story grammar instruction with varying degrees of explicitness that ranged from scaffolding, modeling and question prompts to

direct instruction of story components. The age of the children most likely influenced the method of story component instruction. For example, the second grade participant in the study by Klecan-Aker (1993) was able to understand very explicit instruction on specific story components. In contrast, the preschool children in the studies by Davies et al. (2004) and Hayward and Schneider (2000) may not have the meta-linguistic skills for such instruction and would benefit more from scaffolding, questioning and visual cues. In all five studies, participants improved on narrative macrostructure in narrative generation tasks (Gillam et al., 1995; Hayward and Schneider, 2000; Klecan-Aker, 1993; Swanson et al., 2005) or narrative retell tasks (Davies et al., 2004).

Narrative intervention and syntax instruction. Descriptive studies of narrative abilities in children with LLD have suggested that syntactic deficits are a primary underlying cause of poor narrative ability (Bishop and Donlan, 2005; Gillam & Johnston, 1992; Liles, 1987; Strong and Shaver, 1991). Swanson et al. (2005) addressed both grammatical and narrative deficits directly by including grammatical tasks with narrative activities in their intervention. Participants had three grammatical goals based upon their conversational and narrative samples. The goals were targeted through a sentence imitation drill in which the child was required to repeat sentences during each intervention session. In addition, during story retellings, the clinician recast sentences that the child had said incorrectly. Results indicated no improvement on measures of syntax. Gillam et al. (1995) also addressed syntax skills in one of the treatment conditions. They found that the group receiving narrative instruction (whole language) made gains on the story retelling tasks while the group receiving targeted syntax

instruction (language skills) scored higher on measures of language form. Thus, each group showed gains on the respective targets of instruction but not on the other. Klecan-Aker (1993) and Davies et al. (2004) measured grammatical outcomes that were not directly targeted in intervention. The participant in Klecan-Aker's study showed no improvement on standardized receptive and expressive language scores. Davies et al. (2004) noticed an improvement in the use of connectives in the stories of their participants. This observation is not surprising considering the reciprocal relationship of story coherence and cohesion.

The methods for narrative intervention used in these five studies reflect those proposed by graduate level textbooks and in journal articles for practitioners. All five studies provided instruction with varying levels of explicitness on story macrostructure. They also included multiple opportunities for students to practice telling and retelling stories. The results of these studies illustrate that *explicit* instruction and practice with story telling can lead to gains on narrative objectives. Four studies included distal outcome measures of skills not directly targeted in instruction (Davies et. al., 2004; Gillam et al., 1995; Klecan-Aker, 1993; Swanson et al., 2005). With the exception of one study (Davies et al., 2004), performance on these measures did not increase.

Narrative Intervention for Students with Learning and Academic Difficulties

Several studies have explored the efficacy of narrative intervention with students with learning disabilities and students who are low performing (Fitzgerald & Spiegel, 1983; Klecan-Aker et al., 1997; Morrow, 1985). These studies can be divided into two

categories (1) studies focusing on storytelling outcomes and (2) studies focusing on reading comprehension outcomes.

The principles of instruction are similar to those used in studies with children with language learning disorders. In a 16-week intervention study, Klecan-Aker et al. (1997) randomly assigned 15 participants with LD (mean age = 7;2 years) to a treatment and control group. The authors found that instruction of story components (e.g., setting, initiating event, action, internal response, consequence, ending) followed by multiple choice and fill-in-the-blank activities led to an increase in the complexity of stories by the treatment group. Similarly, a study with poor and average fourth grade readers also focused on instruction of story components (Fitzgerald & Spiegel, 1983). Fitzgerald and Spiegel found that specific instruction of story grammar led to increased complexity of stories produced by the treatment group as compared with the comparison group (dictionary usage and word study instruction). This study also examined story comprehension and found that story structure instruction had an effect on reading comprehension.

Intervention studies have also assessed the effect of story retelling on story production and story comprehension in children with learning disabilities (Morrow, 1985; Morrow, 1986; Morrow, O'Connor & Smith, 1990; Morrow, Sisco & Smith, 1982). The results of these studies suggest that retelling practice in itself improves a child's awareness of story structure and comprehension. In one study, Morrow et al., (1982) assigned 24 children from special education classrooms (mean age = 6;1) to a narrative treatment and a control group. Children participated in 12 individual story-reading

sessions in which they were asked to listen to a story and then told to retell it to a puppet after hearing it. Guided questions by the examiner were used to help each child attend to elements of story structure. The control group heard the same stories and were asked to draw a picture afterwards, without mediation from an adult. Children in the treatment group included more structural elements in retold as well as original stories. In addition, they performed better on a comprehension test that assessed their knowledge of stories they had heard. Morrow performed additional larger studies confirming the effects of story retellings with structural guidance on improving mixed ability (below average to above average) kindergarten students' ability to produce more complex stories (1986) and to improve comprehension of stories (1985). Her conclusions indicated that frequent retelling experience (8 times) with guidance had a larger effect than a single experience of retelling with guidance.

Less related to the outcomes of this proposed study are studies on narrative instruction with older students with LD that have focused on the end goal of increasing *reading comprehension*, rather than improving storytelling ability or listening comprehension. (Carnine & Kinder, 1985; Dimino et. al., 1990; Gurney et al., 1990; Idol, 1987; Short & Ryan, 1984; Singer & Donlan, 1982). Dimino, Taylor and Gersten (1995) summarized this research and concluded that direct instruction of story grammar can lead to improved comprehension, particularly when the intervention is of longer duration (10 or more sessions). They also found that instruction is most effective when the teacher models strategies (e.g., summarizing, asking oneself story grammar questions), provides guided practice and then gives opportunities for independent practice with strategies. In

addition, passages that have relatively simple and transparent textual features should be used for initial practice and learning of strategies. All of the studies examined by Dimino et al. had participants in the third grade or above and three studies contained participants in high school (Dimino et al., 1990; Gurney et al., 1990; Singer & Donlan, 1982). Dimino et al. (1995) concluded that specific instruction on story grammar to improve comprehension should begin in the third grade and be refined for more complex stories or expository text in the later grades.

Implications of Narrative Intervention Research

All of the studies with children with LLD used individualized (Klecan-Aker, 1993; Swanson et al., 2005) or small group instruction (Davies et al., 2004; Gillam et al., 1995). Benefits of using small group or individualized instruction for language instruction include the increased opportunities for children to have individual terns in speaking, retelling or repeating information. In addition, Cazden (1988) suggests that classroom time constraints can negatively affect narrative performance of a child with cultural differences if the child is criticized for atypical story construction or is forced to adapt or shorten the story. The purpose of producing narratives in a social context is to engage a listener. For children with language difficulties, audience engagement is more easily maintained in a small group. The positive effects of audience engagement may also provide support for delivering narrative instruction in a small group rather than in an individualized setting.

Narrative intervention studies for children with LLD and LD provide preliminary support for the efficacy of explicit narrative instruction in a small group or individual setting. Further research is needed to verify these effects on a larger sample size within a randomized controlled design. Three of the studies with children with LLD had 10 or less participants (Gillam et al., 1995; Klecan-Aker, 1993; Swanson et al., 2005) and the other two studies had only slightly more (13 and 34) (Davies et al., 2004; Hayward & Schneider, 2000). In addition, 4 of the 5 studies did not include a comparison or control group (Davies et al., 2004; Hayward & Schneider, 2000; Klecan-Aker, 1993; Swanson et al, 2005). Three studies on students with LD or academic difficulties used randomly assigned treatment and comparison groups but also had small numbers of participants (Fitzgerald & Spiegel, 1983; Klecan-Aker et al., 1997; Morrow et al., 1982). The best way to make causal claims is through the use of experimental designs applying random assignment of participants (USDOE, 2006). This study seeks to extend the research on narrative intervention in a randomized controlled trial.

Further research is needed to determine if children with narrative difficulties a) have similar narrative difficulties as children with LLD and b) respond differently to narrative instruction. In addition, research is needed to identify effective screening measures. Rather than first identifying a child with a language impairment and *then* assessing for difficulties with narrative, students can be screened to assess risk for poor narrative ability and then provided with instruction base on their needs. This shift suggests that all children, regardless of diagnosis, need to have a certain level of competence in narrative skill to succeed in school and thus should be readily identified

and provided with intervention. This instruction can be provided early and intensively without qualifying children for special education. This study will include all second grade children in one school who score poorly on a narrative screening measure. Children at this age who have not developed strong narrative skills are at risk for poor reading comprehension and would not likely develop strong narrative skills without intervention. Studies on children with LD have shown that they continue to have narrative difficulties in the later grades (Levi et al., 1984; Montague et al., 1990; Newcomer, Barenbaum & Nodine, 1988).

Finally, it is useful to compare the narrative difficulties in the descriptive studies with the components of instruction in the intervention studies. Although all of the intervention studies discussed in this chapter addressed story macrostructure, only two of the studies provided explicit instruction syntax, a common area of deficit in narratives of children with LLD as compared to their age-matched peers (Gillam et al., 1995; Swanson et al., 2005). No study targeted the use of cohesive elements or the use of elements of expressive elaboration. As these are features that distinguish narratives of children with LLD from those of their peers, it would be useful to examine the effects of explicit teaching of these elements within an intervention study.

Summary

Although narrative instruction is commonly used by speech-language therapists and results of previous studies indicate that knowledge of narrative macrostructure can be improved, there have been relatively few studies that have adequately explored the effects of narrative instruction on students with narrative difficulties. Areas of difficulty

that distinguish narratives of children with LLD and LD from their typically developing peers, such as expressive elaboration and use of cohesive ties, have not be directly targeted intervention research. This study seeks to add to the previous research by providing an randomized-controlled intervention study that addresses those areas in addition to story macrostructure. Participants will include students who demonstrate weaknesses in oral narrative ability but who may not be identified as having a language impairment.

CHAPTER 3

METHOD

This experimental study compared the effects of a small group narrative intervention with typical classroom instruction on oral narrative ability, narrative comprehension and vocabulary knowledge for second graders with poor narrative ability. Second graders were screened and those who met criteria for poor narrative ability were randomly assigned to a treatment group or a comparison group that did not participate in treatment.

Research Questions

The following primary and secondary research questions guided this study:

Primary

1. What are the relative effects of a small group narrative instruction compared with a comparison group receiving no specialized small group instruction on students' outcomes on oral narrative ability?

2. What are the relative effects of a small group narrative instruction compared with a comparison group receiving no specialized small group instruction on students' outcomes on narrative comprehension?

Secondary

3. What are the relative effects of a small group narrative instruction compared with a comparison group receiving no specialized small group instruction on

students' knowledge of story specific vocabulary words (words encountered in story books used for narrative instruction).

Procedures

Procedures included: (a) screening all second grade students in one school, (b) pretesting qualifying students, (c) randomly assigning students to treatment or comparison groups, (d) implementing an 8-week narrative intervention and (e) posttesting participants.

After obtaining consent from the principal of the school to conduct the study, the investigator met with the 10 second grade teachers to explain the purpose and the timeline of the project. All 10 teachers agreed to participate in the study and the school agreed to use two tasks of the Test of Narrative Language (TNL) (Gillam & Pearson, 2004) to screen all second graders (n = 180) for narrative ability. The district reading specialist and speech-language pathologist were interested in obtaining the screening results to determine if these tasks could be used to screen children for language difficulties. One task required the student to listen to a story told by the examiner and answer questions about the story and the other task required the student to retell the story. Both tasks took 5-7 minutes to individually administer.

Qualifying criteria included (a) a score below one standard deviation on one narrative task or (b) a low survey ranking (1 or 2) combined with a score below the fiftieth percentile on one task. These criteria were intended to identify children who had difficulty with oral narrative production or comprehension but who were not necessarily

diagnosed with language impairment. Given the potential of measurement error in using a single test at a single time to identify students with narrative deficits (Bracken, 1988; McCauley & Swisher, 1984), teachers were asked complete a four question survey of each student's narrative and comprehension ability (Appendix B) to verify that the students who performed poorly on the subtests had difficulties with language. The teachers had the advantage of working with these students during the first 7 months of the school year and had knowledge of their reading and language abilities. Using the scores from the subtests of the TNL and the information from the teacher survey, the following criteria were developed to qualify students for inclusion into this study:

1. Students were in the second grade.
2. Students scored one standard deviation below the mean for their age group on at least one of the screening tasks. Students who scored high on the teacher survey (score of 3 or 4) on narrative and comprehension ability were suspected to be false positives and were eliminated from this group.

OR

Students scored within one standard deviation but below the fiftieth percentile on at least one screening task *and* were identified by their teacher as having difficulties with narrative ability or reading or listening comprehension (score of 1 or 2). These students were suspected to be false negatives as they did not score below one standard deviation on the narrative tasks but were identified by their teacher as having significant difficulties with storytelling and comprehension. In accordance with the principal's request, students identified as Limited English

Proficient (LEP) and receiving pull-out services for English language were not accepted as possible study participants. School leaders thought that these students were already receiving adequate additional small group language support and wanted to maximize students' time within the classroom.

3. Students provided written consent from a parent or guardian for participation in this study.

Of the 180 students screened, 57 met the criteria for inclusion in the study and 37 students returned signed parent consent forms. Examination of screening criteria revealed that students who returned consent forms did not vary with respect to screening scores or teacher rankings to those students who did not return consent forms.

Students who returned consent forms were then randomly assigned to treatment and comparison conditions. To randomize the students to each condition, the investigator put students' names on separate folded pieces of paper, drew the papers from an envelope, and alternated placing each paper in the "treatment group pile" or "control group pile." After randomization, the investigator examined the distribution of students who were designated by the school as Limited English Proficient (LEP) in each group and found that the control group had a higher proportion of LEP students. All LEP students were redistributed evenly between groups and other students were then randomly chosen and re-assigned to make the group numbers equivalent.

Treatment groups consisted of 3-4 students for a total of 5 groups. One student moved during the third week of the 8-week intervention leaving 18 students in the research intervention and 18 students in the comparison condition. The investigator, a

licensed speech-language pathologist, conducted the small group intervention outside of the classroom. Students in the intervention condition participated in 30-minute sessions three times a week for 8 weeks beginning in March until the end of May. Intervention was implemented each Monday, Wednesday and Friday of each week with the exception of two days in which there was an grade-wide assessment and a school holiday (22 total days). Students attended an average number of 19.7 days (range = 17-22 days). Lastly, students were posttested within five days of the end of the intervention.

Participants

Participants were 36 second grade students with poor narrative ability ranging in age from 7 to 9 at a single elementary school that had a significant number of students from linguistically and culturally diverse backgrounds. All students received their classroom instruction as well as the narrative intervention in English. Demographic information for the students in the treatment and comparison group is provided in Table 1:

Table 1

Demographic Information

Group	*n*	Mean Age	Male	Female	Hispanic	Non-Hispanic	Qualify as Limited English Proficient	Received speech-language services	Received small group reading instruction
Narrative Intervention	18	8;3	9 (50%)	9 (50%)	11 (61.1%)	7 (38.8%)	3 (16.6%)	3 (16.6%)	8 (44.4%)
Control Group	18	8	9 (50%)	9 (50%)	6 (33.3%)	12 (66.6%)	3 (16.6%)	0 (0%)	4 (22.2%)
Narrative Intervention vs. Control Group: Fisher's Exact Probability	36		.63		.09		.67	.11	.14

The participating school is located in a suburb of Austin, TX with 49% of the students eligible for free and reduced-priced lunch. Fisher's exact probability test was employed for the following noncontinuous demographic variables: gender, ethnicity, and Limited English Proficiency (LEP) (Table 1). In addition, the number of students receiving speech/language support or supplemental reading support was also compared for each group. The number of male and female participants was equivalent for both the intervention and comparison groups. There were more Hispanic students in the intervention group than in the comparison group; however, the difference was not significant (Fisher's exact probability = .09). There were an equal number of students who qualified as Limited English Proficient (LEP) in both groups. Groups varied in terms of students receiving speech/language support (Fisher's exact probability = .11) and supplemental reading support (Fisher's exact probability = .14) but the differences were not significant.

To determine if the groups were equivalent with regard to language ability, a *t* test for independent samples was employed for the standard scores of two subtests of the *Test of Language Development: Primary (TOLD-P:3)* (Newcomer & Hammill, 1997). Each of these subtests has a mean of 10 and a standard deviation of 3. The oral vocabulary subtest and the sentence imitation subtest were administered to each participant prior to the intervention. Although the mean of the control group was lower than the intervention group on both subtests, the differences between the group means were not significant (see Table 2).

Table 2

Oral Vocabulary and Sentence Imitation Subtests: TOLD-P:3

Subtests	Narrative Intervention (n = 18)		Comparison (n = 16)			
	M	*SD*	*M*	*SD*	*t*	*p*
Oral vocabulary subtest (TOLD-P:3)	7	2.25	6.19	2.01	1.105	.28
Sentence imitation subtest (TOLD-P:3)	7.56	2.33	7.06	2.86	.553	.584

Note: TOLD-P:3 = Test of Language Development-Primary, Third Edition (Newcomer & Hammill, 1997).

Measures

Screening, pretest and posttest measures were administered by licensed speech-language pathologists and supervised graduate students in speech-language pathology who were unaware of the treatment conditions. Testers received 1 hour of training before testing and were paired to practice test administration. During testing, testers were supervised for a proportion of the test administration by the investigator. Random assignment of participants to intervention and comparison conditions occurred after pretesting. To assure independence of test data, the investigator did not participate directly in posttesting.

Test of Narrative Language (TNL)

The Test of Narrative Language (TNL) is an individually administered, standardized test designed to measure the comprehension and production of oral narratives. All second grade students in one school were screened by the first two tasks of the TNL (Gillam & Pearson, 2004). The remaining tasks of the TNL were then administered pre- and post-intervention to students who met the qualifying criteria for acceptance into the study with regard to screening scores, and/or who had received teacher confirmation of low language or reading ability and who had obtained parental permission to participate in the study.

The TNL includes six tasks that assess narrative comprehension and production. The narrative comprehension subtest includes three tasks that require the child to listen to stories and then recall and understand information as well as to make inferences about information not explicitly stated. The oral narration subtest has three narrative tasks that assess the child's ability to retell a story just heard, tell a story about a sequence of pictures and tell a story about a single picture.

The normative sample for the TNL consisted of 1,059 children residing in 20 states. The characteristics of the normative sample with regard to gender, race and ethnicity reflect those of the general U.S. population. A total of 12% Hispanic students and 14% Black students were included in the sample. Eleven percent of the sample were from families with an annual income below $15,000.00. The oral narration subtest and the narrative comprehension subtest have a mean of 10 and a standard deviation of 3. For this study, standardized scores rather than raw scores are presented so that the data can be more easily interpreted.

Coefficient alpha for the entire TNL is .88, closely approximating the desired coefficient status of .90. Test-retest reliability coefficients for the narrative comprehension subtest are .85, for the oral narration subtest, .82, and for the total narrative language ability, .81.

Test of Language Development: TOLD-P:3

Two subtests of the Test of Language Development: Primary, Third Edition (TOLD-P:3) (Newcomer & Hammill, 1997) were administered to determine if the

treatment and comparison groups were equivalent with regard to language ability. The TOLD-P:3 was normed on a sample of 1000 children in 28 states. The sample selection procedure resulted in a normative sample that is representative of the U.S. as a whole with regard to gender, race, residence, ethnicity, family income, educational attainment of parents, and disabling condition. Normative scores for the subtests are presented in terms of standard scores having a mean of 10 and a standard deviation of 3.

The oral vocabulary subtest has 28 items that measure a child's ability to give a concise and accurate definition of common words in English (e.g., bird, castle). The sentence imitation subtest is designed to measure a child's ability to produce syntactically correct sentences in English by requiring the child to imitate increasingly longer and more complex sentences. Two students in the control group were above the age for using the standard score from the TOLD-P:3 and were given similar subtests on the Clinical Evaluation of Language Fundamentals – Fourth Edition (CELF-4) (Semel, Wiig & Secord, 2003).

Target Word Vocabulary Test

A researcher-designed, criterion-referenced vocabulary test was developed and administered to both the treatment and comparison groups at pretest and at posttest. According to the National Reading Panel (NICHD, 2000), specific vocabulary growth is best assessed through researcher- or teacher-developed tests because these measures are most sensitive to instructional gains. Target words were chosen from the books that were read in intervention using Beck, McKeown and Kucan's (2002) criteria for selecting

words. For general vocabulary instruction, Beck et al. suggest choosing vocabulary words that are sophisticated but are of high utility and that may be important for reading comprehension. These words are often synonymous with words that the student already knows (e.g., *peculiar* = weird; *assistant* = helper). The rationale behind this method is to provide students with vocabulary words that further refine and deepen concepts that they already have. As the primary purpose of vocabulary instruction in this study was to facilitate story comprehension, the students in the narrative intervention group received brief instruction and review of select vocabulary words or phrases before encountering them in the stories that were read. Words were also reviewed during subsequent discussions of the story.

The vocabulary test measured a student's expressive knowledge of target words by requiring the student to provide a complete definition of 15 words (each word = one point). The test format and the prompts were similar to those of the oral vocabulary subtest of the TOLD-P:3 and took approximately 5 minutes to administer. The test was piloted on three average performing students of the same age as the students in this study to gauge typical answers for this age group. Although the difference in scores between the treatment and comparison groups was statistically significant, the mean and range of scores at pretest suggests that students in both groups were unfamiliar with most of these words. The mean for the treatment group at pretest was 3.11 (standard deviation: 2.11; range: 0-8) and the mean for the comparison group was 1.83 (standard deviation: 1.04, range: 0-4).

Description of Intervention

The author provided the narrative intervention for all treatment groups. Treatment components in the narrative instruction reflected typical second grade objectives and addressed the story macro- and micro structure difficulties that are commonly experienced by children with LLD. The scope and sequence of instruction is described in Appendix G. Instructional discourse was used to assist student in understanding and producing narratives (Merritt, Culatta & Trostle, 1998). The principles of instructional discourse include: (a) providing questions in various levels of complexity, (b) maintaining a balance of comments and questions, (c) elaborating/expanding on students comments, (d) providing an organizational framework for the lesson, (e) making the main points explicit, (f) scaffolding of difficult concepts, (g) modeling and (h) providing multiple opportunities for the children to respond and repeat information.

Narrative macrostructure. The recognition and use of essential story components (e.g., setting, internal action, initiating event etc.) were addressed through explicit instruction of story parts and supported by extensive modeling and visuals. The framework for teaching story components was adapted from Strong and North's (1996) activities for meaningful literature-based intervention. Five books were read to the students to provide the basis for discussion of these components: *Strega Nona* (DePaola, 1975), *Stellaluna* (Cannon, 1993), *Flat Stanley* (Brown & Nash, 2006), *Sylvester and the Magic Pebble* (Steig, 1969) and *Rumpelstiltskin* (Langley, 1992). These books were carefully chosen for their clear organization of narrative structure as well as for their

appeal for this age group. Some of the students were familiar with a few of the books and others had not seen them. Although familiarity perhaps aided recall of the stories, the focus of the lessons was on recognition of story structures and not the recall of specific stories. The students were introduced to one or two story components with each story and first asked to identify the components. They were then asked to identify these elements in other stories. Later, students produced stories with these components and were asked to evaluate if their stories included all components.

Lastly, the overall *quality* of stories was addressed by instructing students on how to include elements of expressive elaboration such as introducer (e.g., "Once upon a time…"), characters' names, adjectives reflecting internal state and clear endings. Instruction was carefully designed to be sensitive to cultural differences in storytelling ability only addressed common cross-cultural story elements. For the first 6 weeks a four-lesson framework was repeated with each book (Appendix F). The last 2 weeks, the students practiced what they had learned by developing stories of their own.

Narrative microstructure. In addition story macro-components, instruction also targeted the correct use of cohesive devices such as reference and conjunctive ties. The importance of using clear pronominal references was taught by contrasting the use of correct and incorrect examples, peer monitoring and visuals. For example, students listened to stories told by a puppet (e.g., "Confusing Cathy") who used ambiguous referents for characters (e.g., he, she). Students were asked to think about why Cathy's stories were confusing and how she could change them to make them less confusing. In addition, students were also taught to recognize and use conjunctive ties or "glue words"

(e.g., because, then, and, so, but) to increase the conjunctive cohesion in their stories. Procedures for teaching conjunctive ties were adapted from Hutson-Nechkash (2001).

Although vocabulary instruction was not a primary focus of the intervention, vocabulary words were taught that would facilitate students' comprehension of the story. The instructional method was modeled after Text Talk, a vocabulary instructional model used with read-alouds (Beck & McKeown, 2007; McKeown & Beck, 2003). The purpose of Text Talk is to teach specific vocabulary words to enhance general vocabulary development. Because the primary goal of this study was to explore the effectiveness of a narrative intervention, the steps of Text Talk were slightly modified for this purpose. Instead of discussing the words *after* the story as Beck and McKeown recommend, students were introduced to new vocabulary and the definitions *before* the story was read. While reading the story, the investigator reviewed and defined the words again. Students were then asked to repeat the word to assist with phonological representation. Examples of use of the word outside of the context were then provided by the investigator. Review of the word occurred in subsequent instructional sessions.

The comparison group condition did not participate in any specialized small group activities. They received language arts within a 90-minute reading/language arts block.

Fidelity of Implementation

The intervention was provided by the investigator, a licensed speech-language pathologist. Fidelity of treatment checklists were developed for each day of the

intervention so there was assurance that each treatment group received identical protocol. A sample of a completed intervention checklist for day 1 of the narrative intervention is provided in Appendix H. For each session, treatment checklists were completed by the investigator to ensure that all components of the lesson plan were addressed. Precise scripting of the lessons was developed so that the investigator could ensure that the lessons were delivered in the same way. Because scripting was so specific, the checklists focused on the *completion* of each activity rather than the *time* spent on each activity. Percentage of activities completed for each lesson was 100% for most lessons and above 90% for some. When lessons were incomplete, the investigator finished the lesson at the beginning of the next session. Lessons that occurred towards the end of the day were occasionally shorter because of the difficulty of finding children who were in recess.

Narrative Analysis

All narratives were audio-taped and transcribed according to the conventions of Systematic Analysis of Language Transcripts (SALT) (Miller & Chapman, 2002) and guidelines by Strong (1998). The narratives were then segmented into communication units (C-units) (e.g., main clause and its subordinating clauses) according to procedures described by Loban (1976). False starts, repetitions and mazes were marked with parentheses and excluded from analyses. The narratives were then analyzed with respect to elements of expressive elaboration and inclusion of cohesive ties.

Elements of Expressive Elaboration Analysis

Expressive elements add interest to a story and are often omitted by children with language difficulties (Ukrainetz & Gillam, 2006). Two stories from the TNL ("Late for School" and "Aliens") as well as a story prompted by wordless picture book (*One Frog Too Many,* Mayer & Mayer, 1975) were coded for each student at pre- and posttest for expressive elements using procedures developed by Ukrainetz and Gillam (2006). The three stories represent slightly different story telling tasks. The "Late for School" story requires the child to describe a sequence of pictures of the routine event of getting ready for school. For the "Aliens" story task, the child is asked to tell a fantasy story about a single picture of aliens landing in a park. For the wordless picture book task, the child is required to look at all of the pictures of a story without print and then tell it to the examiner. All stories were coded by a speech-language pathology student trained in narrative analysis who was "blind" to the treatment condition. Twenty percent of these stories were coded independently by the investigator. Inter-rater reliability was 86%.

Cohesive Tie Analysis

Cohesion been referred to as the "glue" that helps to link parts of the story together (Strong, 1998). Adequate or complete reference ties provide the listener with an introduction to a character by name or description before the character is referred to by a nonspecific pronoun (e.g., he, she, they). An incomplete reference may occur when the speaker does not appropriately introduce a character before using a pronoun to refer to it (e.g., *He* found a frog in the box.). An ambiguous reference tie may occur if it is unclear

to which character a pronoun refers (e.g., "Dan and John went to the store. *He* bought a hotdog."). Children with language difficulties demonstrate ambiguous and incomplete references in their narratives (Liles, 1985; Strong & Shaver, 1991). The number of erroneous pronominal reference ties, (ambiguous and incomplete) as well as the number of complete pronominal ties, were calculated for the two stories from the TNL to determine the effects of intervention on the use of cohesive ties.

Conjunctive ties can be described as additive (e.g., and), temporal (e.g., then), causal (e.g., so, because) and adversative (e.g., but). The investigator, blind to the identity of the participant, coded the pretest and posttest TNL stories for use of conjunctive ties. The procedures used for pronominal and cohesion analysis were adapted from Strong (1998). Specifically, the number and percentage of additive, causal, adversative and temporal ties was calculated with respect to the total number of conjunctive ties. Appendix C includes the forms used for these coding procedures. Twenty percent of the stories were then coded by another rater, a speech-language pathology graduate student trained in narrative analysis, to assess reliability of scoring. Inter-rater reliability was calculated for each of the calculations. For the story prompted by a sequence of pictures (Late for School), the inter-rater reliability of scoring complete reference cohesion ties was 92%. The identification of specific conjunctive ties (e.g., additive, temporal) inter-rater reliability ranged from 82-91%. For the Aliens story, the inter-rater reliability for scoring of complete reference cohesion ties was 84% and the scoring of conjunctive ties ranged from 75-100%.

CHAPTER 4

RESULTS

This research examined the effectiveness of a narrative intervention on second graders' story telling ability, narrative comprehension and vocabulary knowledge. Second grade students demonstrating weak oral narrative skills qualified for this study. Intervention was provided for 8 weeks, in three 30-minute sessions per week. Thirty-six students were randomly assigned to an intervention group or a comparison group. A measure of narrative ability, a measure of narrative comprehension and a target word vocabulary test were administered at the beginning and the end of intervention. In addition, analyses of narratives were performed to further describe the results. The following primary and secondary research questions were addressed:

Primary

1. What are the relative effects of a small group narrative instruction compared with a comparison group receiving no specialized small group instruction on students' outcomes on oral narrative ability?
2. What are the relative effects of a small group narrative instruction compared with a comparison group receiving no specialized small group instruction on students' outcomes on narrative comprehension?

Secondary

3. What are the relative effects of a small group narrative instruction compared with a comparison group receiving no specialized small group instruction on students' knowledge of story specific vocabulary words.

Data Analysis

Fisher's exact probability test was used to compare demographic variables of the treatment and comparison group and a *t* test was used to compare the means of standard scores of language measures. There were no significant differences between the groups on demographic or language measures.

To answer the primary and secondary research questions, three separate ANCOVAs were conducted using the following dependent variables with each pretest score used as a covariate: (1) the narrative comprehension subtest of the Test of Narrative Language (TNL) (Gillam & Pearson, 2004), (2) the oral narration subtest of the TNL and (3) the "Target Word Vocabulary Test." (Appendix E). Separate ANCOVAs were conducted because each of the variables is an independent oral language measure that assesses different abilities.

A descriptive, in depth analysis was used to interpret the outcomes related to the research questions. For this analysis, an ANCOVA was used to examine the difference in length of narratives between groups. Inferential tests were not performed on the expressive elaboration data or the cohesive tie analysis because additional ANCOVAs

would increase the likelihood of Type 1 error. Instead, these analyses were used descriptively to further examine the results of the TNL.

In accordance with APA recommendations and current practice within the field, the magnitude of the difference between the posttest scores of the intervention and comparison groups was estimated by calculating the standardized mean effect size for each dependent variable. (American Psychological Association, 2001; Cohen, 1994). The magnitude of the effects was calculated using Cohens *d* using the pooled standard deviation of the treatment and control group (Cohen, 1988). The following values considered in interpretation: $d = .20$ (small effect), $d = .50$ (medium effect), and $d = .80$ (large effect).

Test of Assumptions

Homogeneity of regression slopes. A preliminary analysis evaluating the homogeneity of slopes assumption indicated that the relationship between the covariates (pretest scores) and the dependent variable did not differ significantly as a function of the independent variable (group). The insignificant interactions demonstrated that this assumption was met for each dependent variable. Results are summarized in Table 3.

Table 3

Test of Homogeneity of Regression Slopes

Covariate	Target Word Vocabulary Test		Oral Narration Subtest		Narrative Comprehension Subtest	
	F	*p*	*F*	*p*	*F*	*p*
Group by pretest	.306	.584	.003	.959	.047	.829

Analysis of Pretest Data

A *t* test for independent samples showed that the standard scores for the narrative intervention group and the comparison group did not differ significantly on the oral narration subtest and the listening comprehension subtest. However, there was a significant difference on mean pretest scores on the target word vocabulary test, $t(36) = 2.302$, $p = .028$ in favor of treatment students. Results are summarized in Table 4. There were no significant differences on demographic variables or on general language measures.

Table 4

Group Comparison on Pretest Measures

Dependent variable	Intervention ($n = 18$)		Comparison ($n = 18$)			
	M	*SD*	*M*	*SD*	*t*	*p*
Oral narration subtest	7.22	1.865	6.78	1.987	.692	.494
Narrative comprehension subtest	6.33	1.680	7.39	2.747	-1.391	.173
Target word vocabulary test	3.11	2.111	1.83	1.043	2.302	.028

Analysis of Intervention Effects

A series of analyses of covariance (ANCOVA), using the pretest of each dependent variable, were performed for each dependent measure to compare the research intervention group to the comparison group at posttest. Assumptions of homogeneity of regression slopes were met for each of the dependent variables. For the standardized measures (oral narration subtest and narrative comprehension subtest) standard scores were used in the effect size calculations. For the researcher-developed vocabulary measure, raw scores were used. These analyses directly addressed each of my three research questions. To assist the reader, I will review each of the research questions and the findings below. Results are summarized in Tables 5-7.

Summary of Research Questions and Findings

Research Question 1

What are the relative effects of a small group narrative instruction compared with a comparison group receiving no specialized small group instruction on students' outcomes on oral narrative ability?

The primary measure used to assess oral narrative ability was the oral narration subtest of the TNL. The ANCOVA revealed a significant different between posttest scores of the treatment and comparison group, $F(2, 33) = 19.25$, $p < .001$, $\eta^2 = .368$. Although there are no specific guidelines in child language research for interpreting η^2,

previous studies indicate that η^2 values between 0 and 25 are considered small, values between .26 and .50 are considered moderately large and values greater than .50 are considered large (Muñoz, Gillam, Peña & Gulley-Faehnle, 2003). A standardized mean effect size difference of 1.45 on the unadjusted posttest means using Cohen's *d* indicates that the intervention group made large posttest gains over the comparison group according to Cohen's (1988) criteria. The growth in standard scores, rather than raw scores, suggests growth of the intervention students beyond what would be expected with development.

Growth in scores also revealed an improvement to a level compatible with their peers of the same age. At pretest, the mean of the intervention group fell in the low average range at 7.22 (test mean = 10; *SD* = 3). At posttest, the mean score of the intervention group was 10.56 (*SD* = 1.34), slightly above the standardized mean of 10 for the test. Examination of individual scores of students in the intervention group indicates that all students scored within the average range on the posttest (Range = 9 - 15).

Research Question 2

What are the relative effects of a small group narrative instruction compared with a comparison group receiving no specialized small group instruction on students' outcomes on narrative comprehension?

The narrative comprehension subtest of the TNL was used to evaluate change in the students' ability to recall and understand information in stories that they hear. Analysis of covariance of the standard scores revealed that there was no significant

difference in the scores of the intervention and comparison groups at posttest $F(2, 33) = 1.508$, $p = .228$, $\eta^2 = .044$. The effect size of posttest means (unadjusted) using Cohen's *d* was .19.

Research Question 3

What are the relative effects of a small group narrative instruction compared with a comparison group receiving no specialized small group instruction on students' knowledge of story specific vocabulary words?

Vocabulary knowledge of words targeted in intervention was assessed by a researcher-developed measure, the target word vocabulary test. ANCOVA revealed a significant difference of posttest scores between the intervention and comparison groups, $F(2, 33) = 9.28$; $p = .005$, $\eta^2 = .219$. Mean effect size difference in posttest scores of the intervention group and comparison group (Cohen's *d*) was 1.32. This difference is considered large by Cohen's criteria (Cohen, 1988). Examination of individual posttest scores of students in the intervention group indicates that 16 out of 18 students made gains on this measure.

Table 5

Posttest Group Comparison on Oral Narration Subtest

	Pretest		Posttest		Adjusted			
Group	*M*	*SD*	*M*	*SD*	*M*	*SE*	*F*	*p*
Intervention (n = 18)	7.22	1.87	10.56	1.34	10.47	.357	19.25	<.001
Comparison (n = 18)	6.78	1.99	8.17	1.917	8.25	.357		

Table 6

Posttest Group Comparison on Narrative Comprehension Subtest

	Pretest		Posttest		Adjusted			
Group	*M*	*SD*	*M*	*SD*	*M*	*SE*	*F*	*p*
Intervention (n = 18)	6.33	1.68	9.94	2.98	10.2	.574	1.508	.228
Comparison (n = 18)	7.39	2.75	9.44	2.18	9.19	.574		

Table 7

Posttest Group Comparison on Target Word Vocabulary Test

	Pretest		Posttest		Adjusted			
Group	*M*	*SD*	*M*	*SD*	*M*	*SE*	*F*	*p*
Intervention (n = 18)	3.11	2.11	6.56	3.40	5.74	.508	9.276	.005
Comparison (n = 18)	1.83	1.04	2.67	2.40	3.48	.508		

Descriptive Analysis: Further Examination of Findings

Expressive Elaboration. Three stories for each child (pre and posttest) were transcribed and coded with respect to elements of expressive elaboration. Two stories, "Late for School" and "Aliens," were storytelling tasks from the TNL. The third story prompt required the child to look through the wordless picture book, *One Frog Too Many* (Mayer & Mayer, 1975), and tell the story to the examiner. These stories were transcribed and elements were coded and then calculated as a single score. Inspection of the graphs of pretest and posttest scores (Figures 1 and 2) reveals that whereas the pretest scores of the treatment and comparison groups were similar, the mean scores of the treatment group on all stories were higher at posttest than the mean scores of the comparison group. This finding suggests that the treatment group included more expressive elements in their stories and confirms the results of the TNL, which is also sensitive to expressive elements. Close examination of the analyses showed that the treatment group provided expressive elements that were specifically targeted in the intervention such as: introductions, character names, internal states and dialogue.

Figure 1. Expressive Elaboration Scores: Pretest

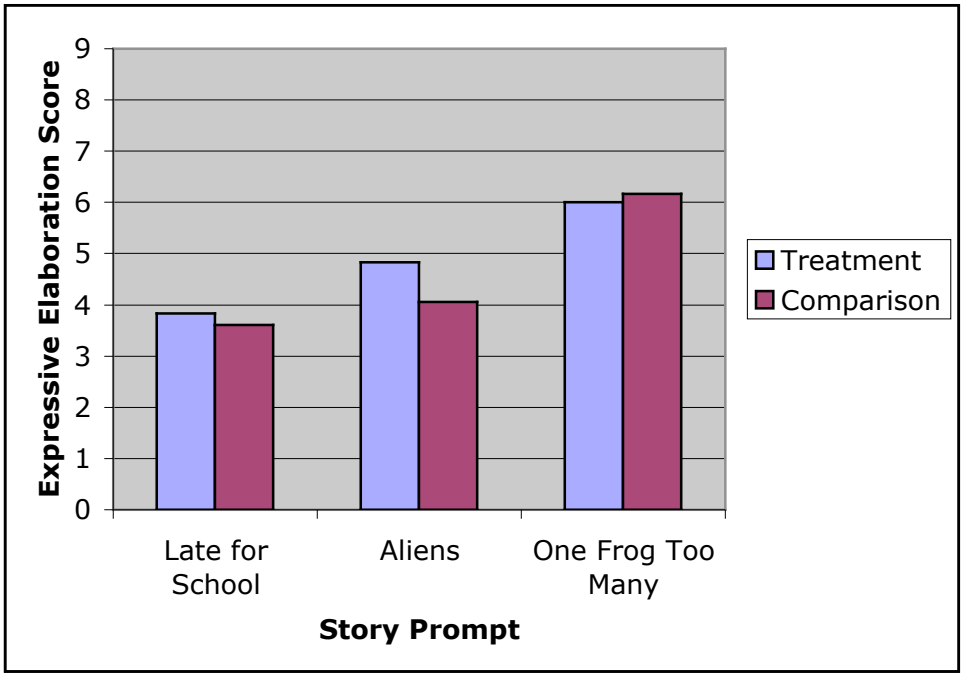
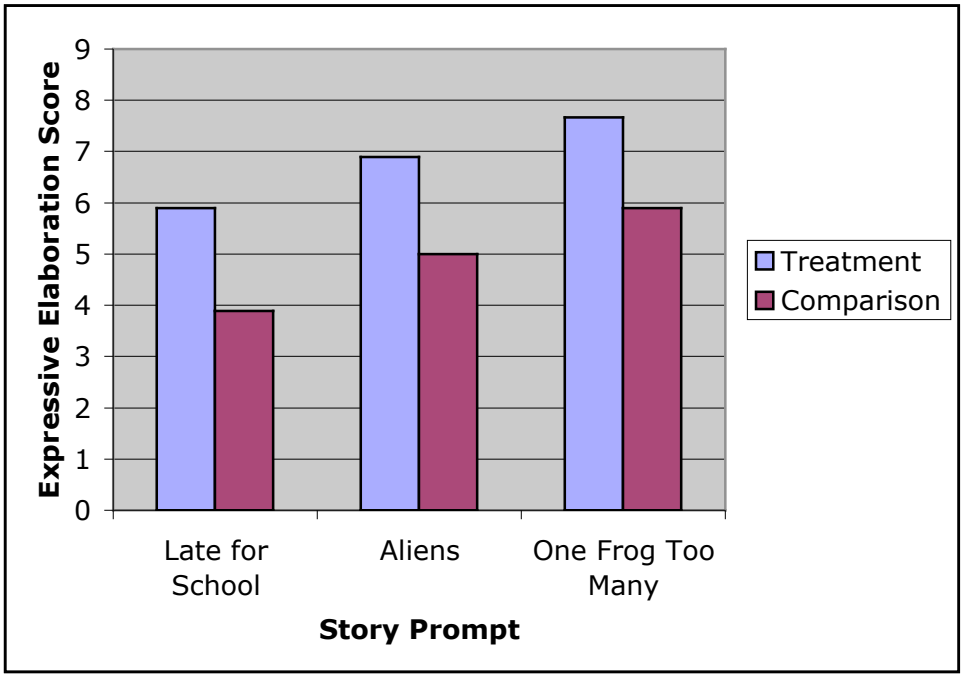


Figure 2. Expressive Elaboration: Posttest Results



Story microstructure. In addition to improved performance on expressive elements and story macrostructure, the intervention group showed increased performance on some aspects of story microstructure. The mean length of stories of the intervention group was higher at posttest than that of the comparison group. The mean number of communication units (C-units) of the two stories from the TNL was compared pre and posttest (Table 8). A C-unit consists of a main clause and its subordinating clauses and is often used as a measure of length for oral narratives (Loban, 1976). ANCOVAs of the posttest C-unit mean for each story were performed using the pretest C-unit mean as the covariate. The treatment group had significantly more C-units at posttest than the comparison group. This increase in story length of the treatment group suggests that they provided more complex stories with more story components.

Table 8

Group Comparison on Communication Units (C-units): Late for School

		Late for School Story C-units		Aliens Story C-units	
		M	*SD*	*M*	*SD*
Pretest	Intervention	10.83	4.25	10.06	4.66
	Comparison	9.56	3.88	9.89	5.78
Posttest	Intervention	16.11	4.65	14.94	4.83
	Comparison	10.28	3.51	10.22	4.84

In addition to longer stories, the treatment group also used more complete reference ties. A reference tie was judged as complete if a clear connection was

established between a referent and the character that it represents. A referent was judged "incomplete" if the (a) referent was not tied to a previously introduced character or (b) if the link was ambiguous. The results of this analysis for two stories are represented in Figures 3 and 4.

Figure 3. Late for School Story: Percentage of Complete Reference Ties

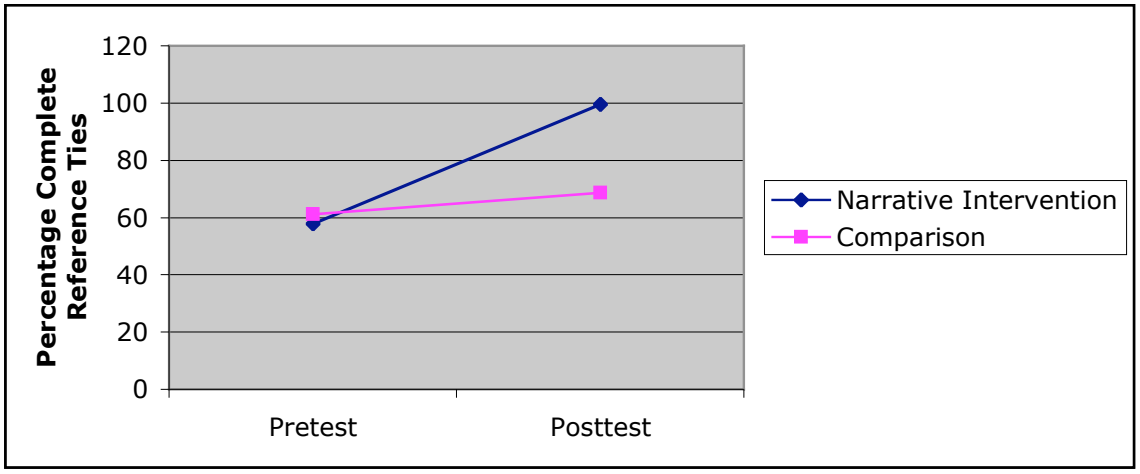
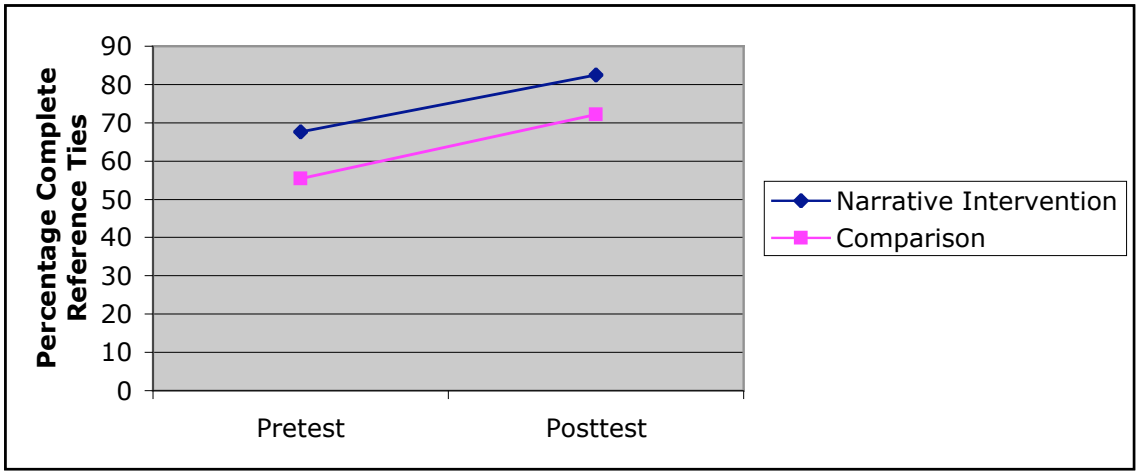


Figure 4. Aliens Story: Percentage of Complete Reference Ties



The proportion of conjunctive devices remained relatively stable between pre and posttest for both groups and was aligned with developmental normative data (Strong, 1998). The conjunctions most often used were "and" and "then" followed by the later developing causal connectives (e.g., because, so) and adversative conjunctions (e.g., but). The intervention group used slightly more of the later developing conjunctive ties at posttest (See Figures 5 and 6).

Figure 5. Percentage of Conjunctive Ties: Late for School

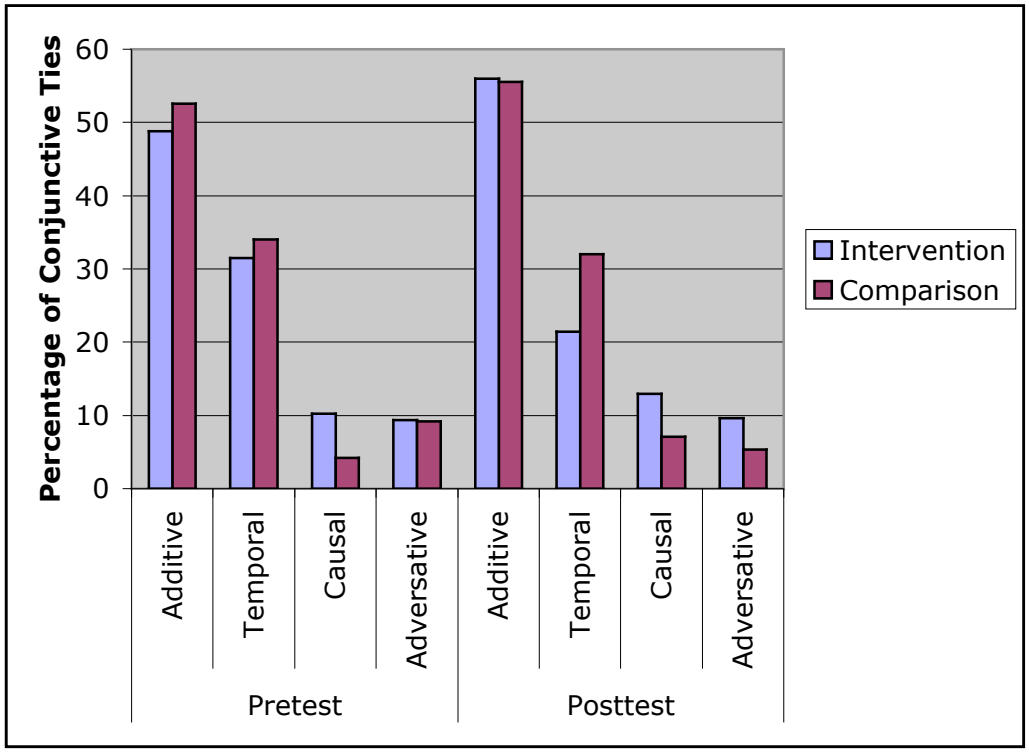
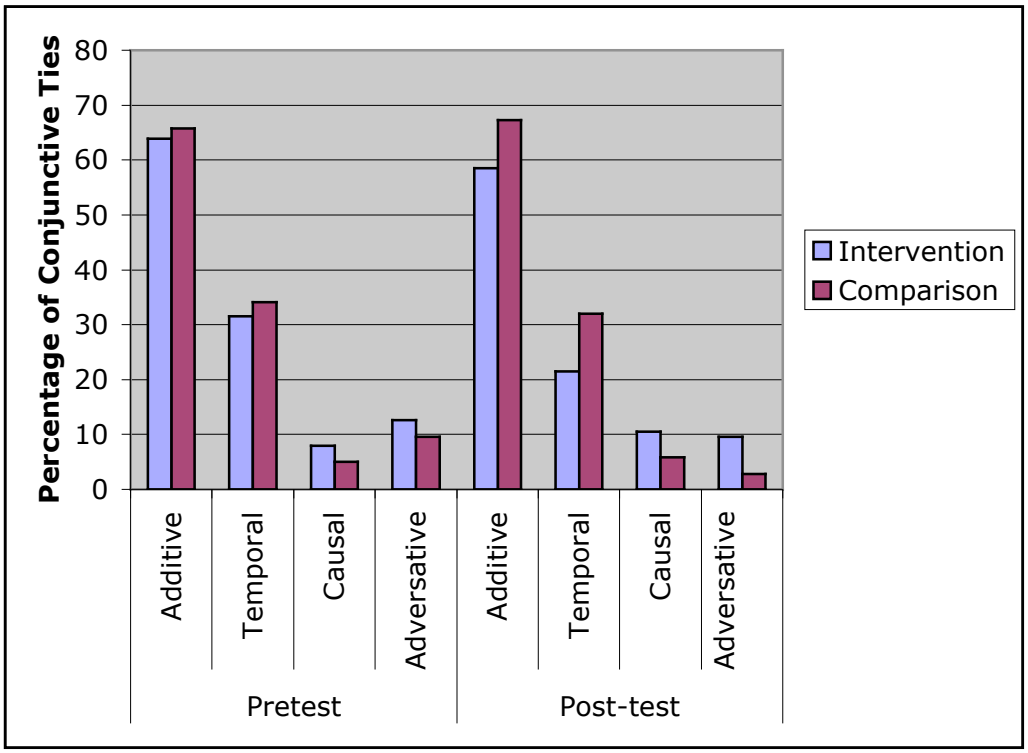


Figure 6. Percentage of Conjunctive Ties: Aliens



Case Studies: English Language Learners

Three students in the treatment group and three students in the control group qualified as Limited English Proficient (LEP) by the school district; however, none of them were provided extra pullout support by the school for oral language. Five students (Narrative intervention: $n = 3$; Comparison: $n = 2$) had homeroom teachers who had English as a Second Language (ESL) certification. The teacher of one LEP student (comparison group) was not certified as ESL.

The pre- and posttest mean scores of the LEP students in the intervention group were compared with mean scores of the other students in intervention group to determine if the LEP students performed similarly to the students who did not qualify as LEP. Group results for each measure are summarized in Table 9 and in Figures 7-9. Like the non-LEP students, the LEP students made gains from pretest to posttest. The LEP students made more gains than their peers on the target word vocabulary test.

Table 9

English Language Learners Mean Posttest Scores

Variables	Intervention (n = 18)			
	LEP (n = 3)		Non-LEP (n = 15)	
Pretest	*M*	*SD*	*M*	*SD*
Oral narration subtest	7.00	1.73	7.27	1.94
Narrative comprehension subtest	5.67	1.53	6.47	1.73
Target word vocabulary test	2.00	2.00	3.33	2.13
Posttest				
Oral narration subtest	10.67	.577	10.53	1.46
Narrative comprehension subtest	8.67	2.52	10.20	3.08
Target word vocabulary test	7.00	1.732	6.47	3.68

Figure 7. Intervention Effects for LEP vs. Non-LEP Participants: Oral Narration Subtest

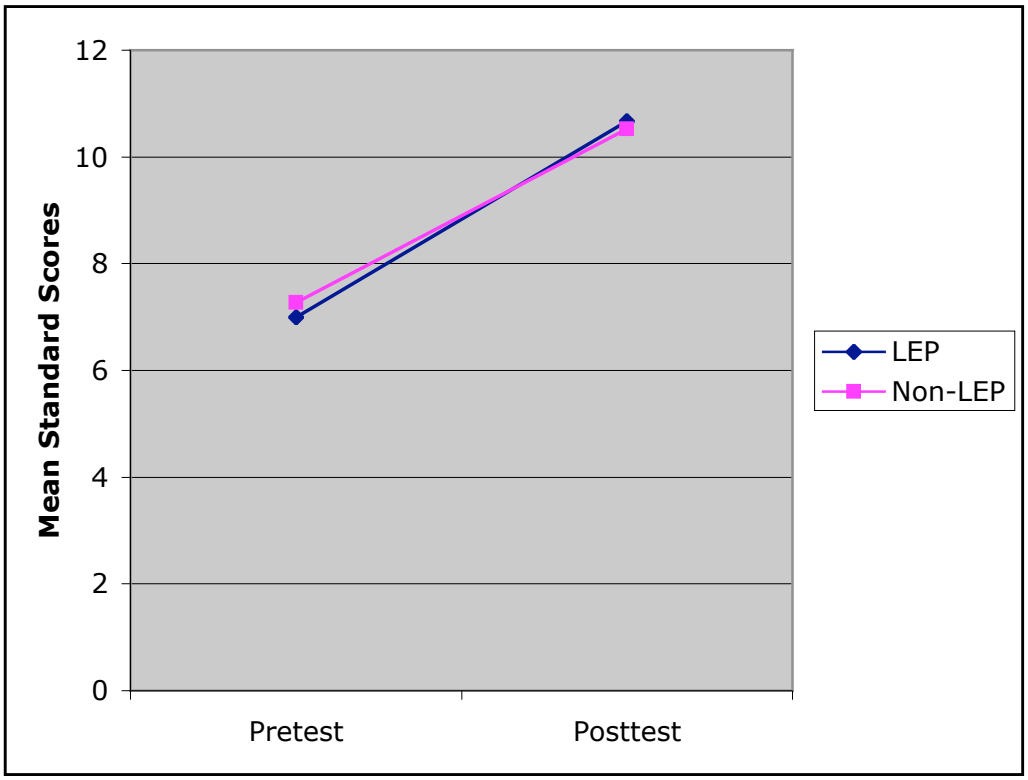


Figure 8. Intervention Effects for LEP vs. Non-LEP Participants: Narrative Comprehension Subtest

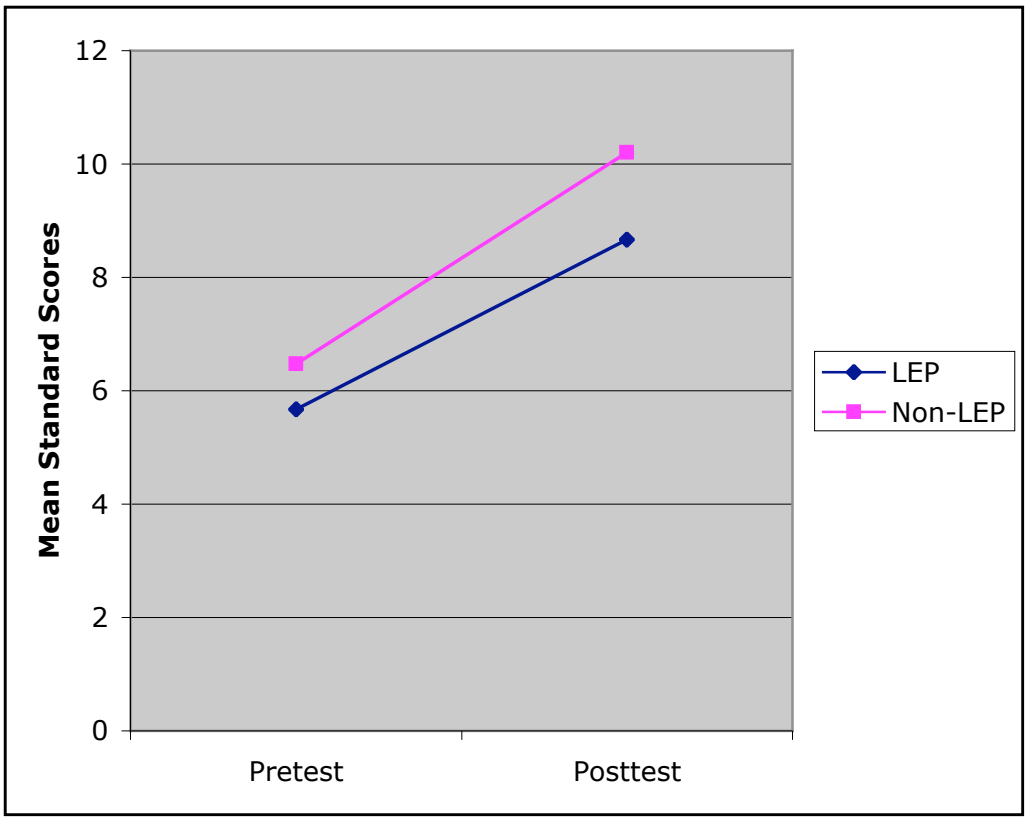
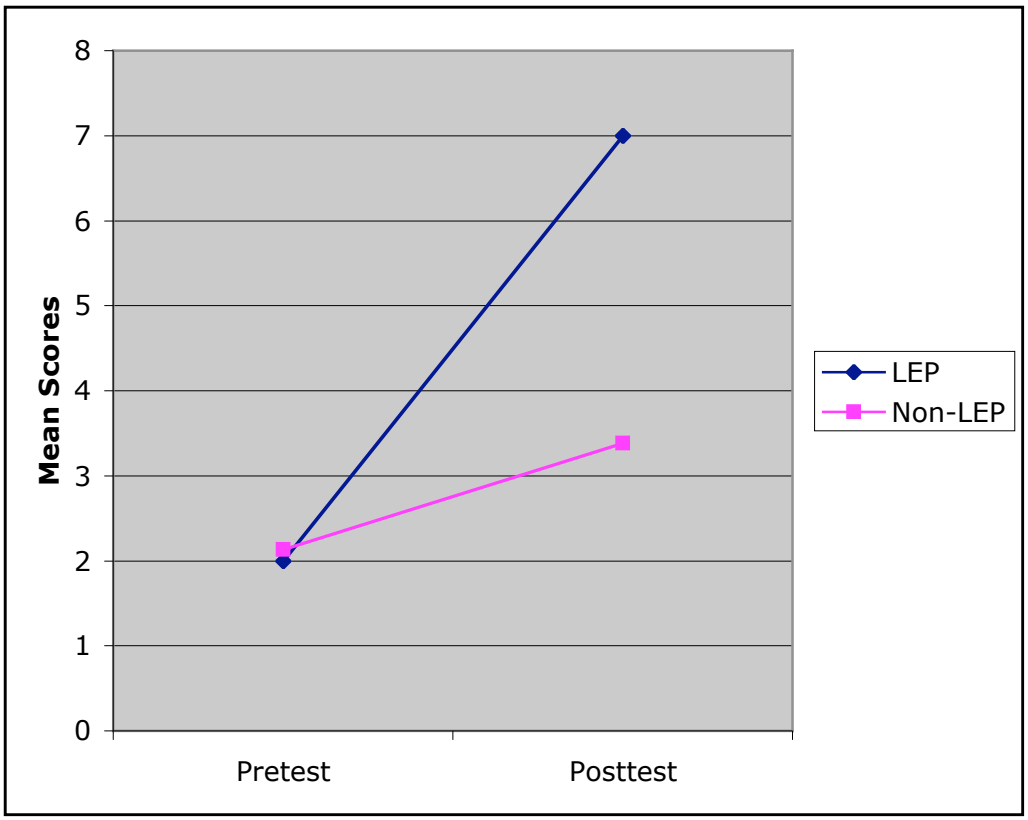


Figure 9. Intervention Effects for LEP vs. Non-LEP Participants: Target Word Vocabulary Test



CHAPTER 5

DISCUSSION

Oral narrative ability is often included in the assessment protocol of children with language difficulties and is considered by speech-language pathologists as an important area for language intervention. Despite the widespread use of narrative assessment and intervention among speech-language pathologists, there have been relatively few empirical studies examining the effects of narrative instruction with students with poor language or narrative skills (Davies et al., 2004; Fitzgerald & Spiegel, 1983; Gillam et al., 1995; Hayward & Schneider, 2000; Klecan-Aker, 1993; Klecan-Aker et al., 1997; Swanson et al., 2005). Results from these studies have indicated that narrative instruction is associated with increasing a child's knowledge of story components, or story macrostructure. This study addresses the need for evidenced-based research by examining the effects of narrative instruction through a randomized controlled trial. In addition, this study addresses some of the microstructure aspects of narrative as well as the use of expressive elements. Descriptive findings include these aspects as well as case studies of students with ESL.

Findings Linked to Research Questions

There were two primary and one secondary research question directly addressed by this study. The first question examined the effect of intervention on oral narrative ability. Results of the oral narration subtest of the TNL indicated that the difference in

posttest scores of the treatment and comparison groups was significant. The effect size that provides an index of the impact of the intervention was 1.45, a very large effect by Cohen's (1988) criteria. The increase in standard scores, rather than raw scores, allows further confidence that the effects can be attributed to the intervention rather than to language development over time.

One reason for the large effects is that the TNL directly measures many of the components that were addressed during the narrative intervention. For example, stories receive higher scores if they contain more of the macrostructure elements that are critical to forming a complete episode: setting, character names, initiating event, internal response, problem and resolution. These story structure elements were taught explicitly in the intervention and through examples and visuals. Although no specific analysis of the inclusion of story components was performed, the posttest effects of the TNL oral narration subtest suggest that the treatment group included more of these elements in their stories.

In addition to the TNL oral narration subtest, story macrostructure was also evaluated by coding and calculating the number of expressive elements included in the stories. During the intervention, the students learned about expressive elements by examining them in the books that were read as well as attempting to use them in their original stories. Specifically, the following elements were addressed: using an introduction, providing a description of the character or a character's name, describing feelings of the characters, and providing dialogue. Three stories, two from the TNL and one from a wordless picture book, were given an expressive element score following a

coding scheme developed by Ukrainetz and Gillam (2006). The treatment group scored significantly higher on expressive elements for all stories. This analysis further validates the increase in the posttest scores on the TNL. In the following example, two stories show how one participant improved the use of story macrostructure elements from pretest to posttest using the same picture prompt. For this task, the child was asked to create a story after looking at a single picture of a boy and girl and a group of aliens:

Alien Story: Pretest

> This girl and this boy wanna go to the park but then they see a spaceship and it lands and the boy got a little scared but the girl was excited and the people that (um) who got off the spaceship was aliens and (uh uh they) the aliens unpack and they park their (uh) spaceship they went and the boy was too scared and the girl wanted to (know) go on the spaceship and she could play with them and the boy was still scared. And that's all.

Alien Story: Posttest

> One day Jacqueline and Alex were in the park going to the playscape. And as soon as they got there they saw a spaceship land and aliens got their stuff and started to come out and wave. And Alex was scared and then Jacqueline wasn't and Alex said, "I'm going home." And then Jacqueline grabbed his hand and said "No, let's see if they could be our friends" and Jacqueline ran up to them and said "Could you be our friend?" and they started attacking them then they got stuck from the slide all the way to the monkey bars because they hanged up there by their shirts and then Alex said, "I told you Jacqueline" and Jacqueline said, "I don't know. I thought they would be friendly, they look nice." And that's all.

In the above example, the pretest story lacks many elements that make a story exciting or interesting including an introduction, character names and dialogue. In addition, there is no clear statement of the problem. The boy is described as "scared" but there is no elaboration of the danger or the threat from the aliens. In contrast, the second

story offers a more complete description of the setting and characters as well as a clear initiating event, internal response, problem and ending. The initiating event, the landing of the spaceship, causes conflicting internal responses of the two characters. Alex is frightened by the aliens but is forced by Jacqueline to greet them. The story ends with the children in peril and Jacqueline realizing her mistake of trusting the aliens. Even though the picture prompt places the girl in the role of a potentially heroic character, the storyteller (a boy) adds a creative twist to the story. The dialogue is effective in establishing the Alex as sensible and knowledgeable and Jacqueline as reckless and trusting, endangering both of their lives. The inclusion of additional story components as well as the expressive elements of this story, combined with the creativity, make it a qualitatively different story from the one told at pretest.

These improvements on story macrostructure elements reflect findings of previous studies (Fitzgerald & Spiegel, 1983; Gillam et al., 1995; Hayward & Schneider, 2000; Klecan-Aker, 1993; Klecan-Aker, 1997; Swanson et al., 2005). Previous narrative intervention studies have varied with the level of explicitness used in teaching macrostructure elements but all have provided practice in using the story structure components in creating novel stories or in retelling tasks. Results of these studies have indicated improvement on story macrostructure.

In addition to story macrostructure, story microstructure was also addressed in intervention by discussing the importance of introducing characters by description or by name, thereby facilitating appropriate pronominal reference ties. Examination of the use of pronominal reference ties indicates an increase in adequate ties of the treatment group

at posttest (Figures 3 and 4). In addition, the treatment group also used more causal ties at posttest (Figures 5-6). The increase in causal ties directly influenced the increase in scores on the oral narration subtest as students were given credit for using causal connectives (e.g., because, so). Although other studies have addressed grammatical aspects of storytelling (Swanson et al., 2005), no study has directly addressed the use of cohesive devices.

The effect of minimal vocabulary instruction was also examined in this study as a secondary research question by comparing the results of the target word vocabulary test administered at pre and posttest. Students in the treatment group scored significantly higher than students in the comparison group at posttest (effect size = 1.32). Although not a primary focus of this intervention, vocabulary instruction of specific words from the stories took place for an average of 3-5 minutes per intervention session. This method can be considered as "embedded" instruction (Coyne, McCoach & Kapp, 2007) in which the students were provided with the definition of the word while reading the story. Additional review of the words took place in subsequent sessions. While more than incidental exposure to new words, vocabulary instruction did not include activities that would promote deeper knowledge of the words such as: creating novel sentences with the new words, encountering the words in multiple contexts or requiring the children to recognize when they encountered the new words.

Although students in the intervention group achieved higher scores on the posttest than did the comparison group, they did not remember the definitions of the majority of words on the test. The mean score for the intervention students was 6.56 (maximum

score = 15; range = 1-13), indicating that most of the students knew less than half of the words at posttest. One reason for the low scores was the *expressive* language demand of the vocabulary test. To receive a correct score for a word (1 point), the child had to provide a complete definition; no credit was given for partial definitions. In contrast, a *receptive* test that requires a child to point to a picture of a word or match a definition with a word would be less rigorous and would potentially yield higher scores. Close examination of the responses of the intervention group on the vocabulary test indicates that the change in responses from pretest to posttest reflected either (a) a new knowledge of the word or (b) a refinement of a previous incomplete knowledge or (c) an awareness that they had encountered the word (e.g., "I've heard it but I don't remember").

In some instances, the context in which a word was learned led some students to remember the *incorrect* meaning of a word. For example, in the book *Stellaluna,* a bat (Stellaluna) is reunited with other bats after living with birds and describes the bats that she meets as "peculiar." When asked to define this word on the posttest, 4 out of the 18 students in the intervention group associated this word with "familiar" (e.g., "something you think you saw before," "like you know it."), a definition that would fit with the context in which this word was encountered. This example shows the power of context in influencing the learning of a word and illustrates the importance of providing multiple and repetitive contexts for each word. Other studies have indicated that extended, contextualized vocabulary instruction with repeated exposure of words is the most effective way to learn a deep or full knowledge of a word (Beck & McKeown, 2007; Coyne et al., 2007).

Another research question concerned the effects of narrative instruction on narrative comprehension. There was no significant difference in posttest scores between the treatment and comparison group on the narrative comprehension subtest of the TNL. Previous studies have found that children's knowledge of story structure and their use of coherence and cohesion in their own stories is related to their ability to comprehend novel stories (Cain, 2003; Cain & Oakhill, 1996). Thus, children with better story production ability have better story comprehension ability. This relationship is also reflected in the strong correlation between the oral narration and narrative comprehension subtest of the TNL (.85). In addition, intervention studies have shown that retelling of particular stories has led to improved comprehension of those stories (Morrow, 1985; Morrow, Sisco & Smith, 1982).

Given the strong relationship between story production and story comprehension, the lack of improvement on the narrative comprehension subtest is somewhat surprising. One possible explanation for the lack of significant improvement in story comprehension in this study is the short duration of the treatment. For the intervention students, the knowledge of story components may have helped to produce better narratives but may not have been sufficiently internalized to improve understanding and recall of story details and events.

A second explanation of the lack of effects in narrative comprehension is the complexity of story comprehension task. In relatively few lessons, a child can learn specific rules for storytelling, resulting in immediate storytelling improvement. In contrast, comprehension of a story involves a variety of skills: working memory,

vocabulary knowledge, syntax knowledge, schema knowledge and the ability to form inferences. These abilities are not specific, rule-based skills that can be increased in such a short period of time. Thus, knowledge of story structure is a necessary, but not sufficient, requirement for good story comprehension.

As an additional explanation, the focus of the narrative intervention was primarily on improving narrative production. No specific time was spent on using story structure to understand novel stories. Comprehension of stories was probed through questions before, during and after the story, but no explicit directions were provided on using story structure to assist in understanding a story. In reviewing studies that used story grammar instruction to improve reading comprehension, Dimino et al. (1995) found that intervention was more effective if instruction proceeded in three phases. In the first phase, students are taught how to use a story grammar strategy (e.g., identifying story grammar elements to assist them in answering comprehension questions). Subsequent phases include guided practice with the strategy and then independent practice. Students in the present study were not taught explicit listening comprehension strategies or encouraged to use such strategies during the intervention or during posttest. Pretest and posttest stories were not ones that they had discussed or practiced retelling. For comprehension gains to occur, students may have to have more explicit instruction on using story grammar to assist them in answering questions about the story. Lastly, for reading comprehension, Dimino et al. found that using such strategies were most effective for students in the third grade or above. The students in this study may have been to young to make use of story grammar knowledge as a comprehension strategy.

In addition to the primary and secondary research questions, this study also explored the effects of narrative intervention on English language learners. In contrast to previous studies that included only children with diagnosed language disorders (Gillam et al., 1995; Hayward & Schneider, 2000; Klecan-Aker, 1993; Swanson et al., 2005) or language delay (Davies et al., 2004), this study included all children at risk for narrative ability regardless of diagnosis. Six of the children included in the study were classified as Limited English Proficient (LEP) by the school district. Examination of the results of these English language learners as compared with the other students showed that they made equivalent gains with regard to narrative ability.

Interestingly, the mean scores of the ELL students on the vocabulary measure were higher than those of the non-ELL students. These results are commensurate with findings of other studies exploring vocabulary instruction for English language learners which have found that ELL students learn vocabulary at the same rate, and often at a faster rate, than English only learners. (Hickman, Pollard-Duradola & Vaughn, 2004; Pollard-Durodola, Mathes, Vaughn, Cardenas-Hagan & Linan-Thompson, 2006; Silverman, 2007). One reason for the higher vocabulary scores among the ELL students in this study is that their low English abilities most likely resulted from lack of exposure to English rather than from an impairment, delay or learning disability. Thus, they may have been more successful word learners than the other participants. In addition, as bilingual speakers, they had additional skills to apply to word learning such as potential knowledge of similar concepts and words in their native language.

Implications for Practice

The results of this study indicate that explicit instruction of basic narrative components can be effective in improving oral narrative ability. Within only eight weeks, the children in the intervention group were able to recite the components of a story and to recognize if their stories contained those components. In addition, they also improved microstructure aspects of storytelling such as story length and use of complete pronominal reference ties.

The strategies used in this intervention were adapted from a popular book on narrative intervention, *The Magic of Stories: Literature-Based Language Intervention* (Strong & North, 1996). Students were also asked to continually evaluate their own and other stories. When they listened to stories being read, they identified story components and cohesive devices. In addition, they were asked to assist a puppet that often told "confusing stories." The students appeared to appreciate alternating roles as story evaluators and storytellers.

Although this study used a pull-out, small group model for instruction, many of instructional techniques could be used with a whole-class environment. One clear advantage of the small group format was that each child had a chance to participate individually in contributing a significant part of the story. Giving each child a role in evaluating the story served to increased attention among the listeners. Within a whole-class environment, the role of the listener may be modified and expanded so that the whole class can participate during a storytelling activity.

The results of the target word vocabulary test suggest that students *can* learn new words when they receive even minimal instruction within meaningful contexts such as stories. This finding corresponds with previous research that has found that storybook reading is an effective way to introduce and teach new words to both monolingual and bilingual children (Beck & McKeown, 2007; Coyne, McCoach & Kapp, 2007; Hickman et al., 2004; Pollard-Durodola, et al., 2006). Notably, the examination of some student responses on the vocabulary test revealed an incremental refinement of word knowledge. It is not enough to encounter a word within a single situation; rather word knowledge is continually modified through exposure of words in multiple contexts. Without multiple encounters of a word within a variety of situations, students may have an incomplete or even an incorrect understanding of a word's meaning. Thus, teachers should consider the purpose of word instruction. If the purpose is only to familiarize the student with the word for story comprehension, embedded instruction may be sufficient. However, if the purpose is to teach students the full meaning of the word, extended instruction of the word in repeated and multiple contexts is necessary.

Limitations of the Study

Several limitations may have influenced the effects and the interpretations of the results of this study. Although attempts were made to avoid methodological flaws, the findings should be interpreted within the limitations inherent in researcher-delivered, school-based research.

First, the sample size was limited by the size of the school and number of consent forms obtained. Although the sample size was larger than previous studies of narrative instruction (n = 36), it was not as large as anticipated and did not allow for close examination of specific groups of students. Previous studies have selected participants with documented language delays or language disorders. In contrast, participants in this study were chosen based upon poor narrative ability and included a more heterogeneous sample with regard to language skills. Due to the sample size, no robust analyses of the response of individual groups of students was possible (e.g., English language learners, students with reading difficulties, students with language impairment) to examine how different students benefited differently from the intervention.

A second limitation concerns the comparison of small group instruction with whole class instruction. The intervention students received all of the narrative instruction within a small group of three or four students. In contrast, the comparison students did not participate in any equivalent small group instruction. Thus, the effects of participating in a small group cannot be separated from the specific effects of the narrative instruction.

A third limitation of this study was that the instruction was provided by the primary investigator. Effect sizes for researcher implemented instruction have been found to be larger than for studies that have used independent instructors. In addition, no independent measures of fidelity of intervention were collected as the primary investigator was the one who had developed the intervention and was the sole deliverer of treatment. Similarly, effect sizes for researcher developed measures have also been

found to be higher than those of standardized measures (e.g., Swanson, Hoskyn, & Lee, 1999). Thus, the results of the target word vocabulary test must be interpreted with some caution.

Measures were administered before and after the completion of intervention to determine progress; however, no interim or progress monitoring assessments were given during the intervention. Therefore, the rate of student progress during intervention was not possible to determine. Lastly, no follow-up measures were taken to measure maintenance of oral language abilities.

Recommendations for Future Research

This study provides support that short-term instruction in oral narrative can lead to significant gains in narrative ability. It also showed that a variety of students could benefit from the same type of narrative intervention. Further research is needed to examine the time needed for response for particular students. For some students, particularly those not diagnosed with language impairment, 8 weeks of intervention may be unnecessary. A recent study on dynamic assessment of narratives showed that a very brief period of instruction led to significant gains in narrative ability among children without language impairment (Peña et al., 2006). In dynamic assessment, the examiner administers a pretest and then uses mediated sessions to teach the child the cognitive and linguistic strategies needed to complete the task (e.g., retell a story). During the mediation sessions, the examiner observes the child to determine evidence of acquisition of new skills and strategies. Peña et al. found that after only two 30-minute mediation

sessions, children with typical language development greatly improved their stories with respect to the episodic structure and complexity, character development, dialogue and the temporal and causal relationships between events. They also found that narrative assessment was more reliable after some mediation had taken place.

In the present study, participants were accepted based solely on their narrative ability; therefore, students with and without language impairment participated in the small group sessions. Because the students in this study were heterogeneous with regard to language ability and were accepted based solely on their narrative production and comprehension abilities, it is likely that many of them would have benefited from different amounts of instruction. Those with stronger language skills may have received sufficient benefit from the intervention in a shorter period while those with language impairment may have required additional sessions. Future research may explore the effects of varying the intensity and duration of instruction with certain types of students.

Related to the need for determining adequate instructional time is the need for accurate screening and progress monitoring measures for narrative ability. At present, there are no standardized screening measures for oral narration. For this study, two standardized tasks of the TNL were used as screening measures. However, as this was not the intended use of these tasks, it was necessary to supplement these scores with teacher questionnaires on student ability. The discrepancies between the scores and teacher report were substantial, requiring a conflation of these data to identify the participants who would benefit from the intervention. Of the 57 children who met the qualifying criteria, only 12 children qualified for the study by both the teachers and their

scores on the screening tests. Thirty students performed in the low range on at least one screening test but were not identified by their teacher as having significant difficulties with narrative production or comprehension; fifteen students were identified by their teachers as having difficulties but scored within the average range on the screening measure. Further research is needed to determine the accuracy of teacher perception in identifying students with poor narrative skills. To assist in this goal, an accurate screening tool for narrative ability is an essential part of a multifaceted language screening battery for school-aged children. Similarly, reliable progress monitoring measures that address different types of narratives are needed to measure progress accurately and individualize instruction. Ideally, narrative tasks that measure narrative recall as well as spontaneous narrative generation would be valuable for screening and progress monitoring as these tasks assess different skills.

The language abilities and narrative abilities of the participants in this study suggest that there is a need for accurate identification screening and monitoring students who may not necessarily be considered as "language impaired" but who may be at risk for language difficulties and need additional classroom support. Excluding the students who qualified for speech-language services (n = 3), the mean scores on the TOLD-P:3 oral vocabulary subtest and the sentence imitation subtest of the participants in this study (n = 31) were 6.61 and 7.29 respectively (Test Mean = 10; SD = 3). The mean score of the oral narration subtest at pretest was 6.85 (n = 33) and the narrative comprehension subtest at pretest was 6.88 (n = 33). These scores suggest that there is a significant

proportion of the students in this school who do not qualify for speech-language services but who have language skills below or within the low average range.

Additional studies may also examine group size on the effects of intervention. The groups in this study ranged from 3 to 4 students, allowing each student to talk during the 30 minute session. Ideally, language instruction should occur in small group situations where there are multiple opportunities for children to talk. However, given the constraints of the school day and the competing demands of other academic subjects, small group language support is rare. Consequently, future studies should examine the effectiveness of whole class narrative instruction and the role of "listeners" within the classroom. Self-assessment of narratives has been promoted as an important metacognitive skill that is critical in adjusting narrative performance (Kaderavek, Gillam, Ukrainetz, Justice & Eisenberg, 2004). In the present study, intervention participants were often placed in the role of evaluating their own and others' quality of stories. They were asked to listen for components and elements that they had learned previously. These evaluative techniques can be applied within the whole class situation, allowing the listeners, as well as the speaker to have a valuable role. Moreover, practice with these techniques with curriculum materials, rather than intervention specific materials, would promote recognition of narrative structure within a variety of formats and genres.

Lastly, vocabulary instruction was explored only tangentially in this study but the results of the target vocabulary test illustrated that the intervention group learned specific words that were targeted in instruction. Close examination of the posttests revealed that a student's definition of a word was greatly influenced by the context in which it was

learned. Research has indicated a close relationship between narrative and vocabulary ability, particularly among ELL students (Uccelli & Páez, 2007). Vocabulary knowledge has an indirect effect on storytelling ability in that the student can more accurately describe characters' feelings and motivations. Future studies may examine the effect that vocabulary instruction alone has on storytelling ability.

APPENDIX A

Narrative Intervention Studies for Students with LLD

Author/Participants	Design/Intervention	Measures	Results/Findings
Davies, Shanks and Davies (2004) *Participants:* 34, "Reception and Year 1" students (Age: 5-7) with delayed language development	*T (Oral Narrative Instruction):* Prompts, cues and puppets were used to assist students in recognizing the structure of their own and other narratives in terms of five leading questions (who, where, when, what happened and why) *Frequency/Duration of intervention:* 3 times a week/8 weeks	*Narrative assessment and analysis:* Age related score and episodic complexity analysis (Merritt and Liles, 1989) of the *Bus Story* and Applebee (1978) story type classification, temporal and causal connectives	*Results:* *T:* Improvement in all measures for stories.

Author/Participants	Design/Intervention	Measures	Results/Findings
Gillam, McFadden and VanKleeck (1995) *Participants:* 8 children with language disorders (Mean Age = 10;10)	*T1 (Whole Language Education)*: Students participated in language activities focusing on literature (pre-discussion, read aloud, book discussion, oral re-creation, songs/plays/games, authorship and intertextual comparisons.) *T2: (Language Skills Education):* Students completed language skills exercises in workbooks, sequenced reading and spelling programs. *Frequency/Duration of intervention:* Not indicated	*Narrative assessment and analysis:* Two oral and two written narrative samples were collected post-intervention. Narratives were scored by form measures (propositions per T-unit, number of dyads, percent embedded dyads, morphemes per T-unit, % acceptable T-units, % marked relationships. Holistic evaluation: 1 = poor, 4 = good.	*Results:* *T1:* Obtained higher "quality" rating scores for stories. *T2:* Scored higher on measures of language form
Hayward and Schneider (2000)	*T: (Story Grammar Intervention Programme)*: Students were explicitly taught story grammar by	*Narrative assessment and analysis:* Two spontaneous stories elicited by	*Results:* *T::* Children

Author/Participants	Design/Intervention	Measures	Results/Findings
Schneider (2000) *Participants:* 13 preschool children with language impairments (Age Range = 4;8 –6;4)	using cue cards to identify story grammar components and by participating in tasks to sort or identify components. They also practiced storytelling with and without pictures. practice of specific language skills. *Frequency/Duration of intervention:* 2 x week, 20 minute sessions (8-12 total sessions)	sequencing pictures were collected at pretest and posttest. They were coded with respect to inclusion of story grammar components and episodic complexity.	produced more story information and more structurally complex stories.
Klecan-Aker (1993) 1, 8 year old, boy with language disability	*T (Oral Narrative Instruction):* Student was taught the story-grammar components. Student answered multiple choice and fill-in-the-blank questions about stories. *Frequency/Duration of intervention:* 2 x week/8 week period	*Narrative assessment and analysis:* Two spontaneous stories were elicited pre and post-intervention. Number of t-units, words per t-unit, clauses per t-unit, and words per clause were computed.	*Results:* *T:* Improvement in the number of story grammar components and the story complexity

Author/Participants	Design/Intervention	Measures	Results/Findings
	week period	computed.	story complexity
Swanson, Fey, Mills and Hood (2005) *Participants:* 10, 7-8 year old children with SLI	*T:* "Hybrid language intervention approach that combines skills-based and naturalistic activities." (story retell tasks, sentence imitation task, story generation task, repeated retellings) *Frequency/Duration of intervention:* 50 min/3 x week/8 week period	*Narrative assessment and analysis:* Children generated two oral narratives based on two sets of pictures. Each story had three pictures. Narrative quality rating (NQ), Developmental Sentence Score (DSS), Sentence imitation score.	*Results:* Narrative quality improved after intervention but no change on other measures.

T = Treatment
RAPT – I= Renfrew Action Picture Test- Information (Renfrew, 1988)
RAPT – G = Renfrew Action Picture Test – Grammar (Renfrew, 1988)
DTLA – 2 = Detroit Tests of Learning Aptitude – 2 (Hammill, 1985)
TONI = Test of Nonverbal Intelligence (Brown, Sherbenou & Johnson, 1982)
W-J Reading = Woodcock-Johnson Psycho-Educational Achievement Battery (Woodcock & Johnson, 1977) Reading cluster score

W-J Writing = Woodcock Johnson Psycho-Educational Achievement Batter (Woodcock & Johnson, 1977) Written cluster score
PPVT – 3 = Peabody Picture Vocabulary Test – 3rd Edition (Dunn & Dunn, 1987)
TACL – R = Test of Auditory Comprehension of Language Revised (Carrow-Wolfolk, 1985)
PLAI = Pre-School Language Assessment Instrument (Blank et al., 1978)
TOLD –P:3 = Test of Language Development: Third Edition (Hammill & Newcomer, 1997)
K-BIT: Kaufman Brief Intelligence Test (Kaufman & Kaufman, 1990)

APPENDIX B

Teacher Questionnaire: Student Narrative Ability

Student Name: _____
Please circle a number to rate the student's ability in the following areas (as compared with peers at this school) on a scale of 1 to 5.

1 = very poor
2 = poor
3 = average
4 = good
5 = excellent

How is the student's ability to:

Comprehend text he/she has just read:

1----------2----------3----------4----------5
Very poor Poor Average Good Excellent

Understand a story that he/she just heard:

1----------2----------3----------4----------5
Very poor Poor Average Good Excellent

Describe a past event (e.g., something that happened on the playground, something that happened over the weekend).

1----------2----------3----------4----------5
Very poor Poor Average Good Excellent

Summarize or retell a story that he/she has just heard or read.

1----------2----------3----------4----------5
Very poor Poor Average Good Excellent

Notes:

APPENDIX C

Procedure for the Analysis of Cohesive Markers

(Reference and Conjunction) (Liles, 1985; Strong, 1998)

1. Read the entire narrative one time and then divide the narrative into Communication Units (C-Units).
2. To judge an element as a reference tie, the meaning must not be apparent within the sentence itself. If the meaning can be determined from within the sentence (e.g., The boy took his car home.), then it is not considered a reference tie.
3. Calculate the number of personal reference ties. These may include personal pronouns (e.g., he, she), possessive determiners (e.g., his, her), and possessive pronouns (e.g., hers) referring to the identity of a character that was previously mentioned in the story.
4. Calculate the number of conjunctive ties. Conjunctive ties are used to join one sentence with another in an additive (e.g., furthermore), adversative (e.g., yet, but), causal (e.g., because) or temporal way (e.g., then).
5. Calculate the adequacy of the personal reference ties. A tie is judged as "complete" if the character referred to is easily found and defined without ambiguity. An incomplete tie is one in which the cohesive marker is not provided in the text (e.g., "Two girls went to the park. They saw her dog running away."). An erroneous tie is one in which the listener is guided to ambiguous or false

information (e.g., The girl and her mother went to the movie. She enjoyed it very much).

6. Calculate the adequacy of conjunctive ties. Conjunctions are coded as erroneous if the ideas in the two conjoined sentences are unrelated or inappropriately sequenced.

Student Number: _____

Reference Cohesion Ties	Late for School	Aliens
Number of Incomplete/Erroneous Reference Cohesion Ties:		
Number of Complete Reference Cohesion Ties:		
Number of Revised Reference Cohesion Ties:		
Total Reference Cohesion Ties:		
Percentage of Incomplete/Erroneous Reference Ties: (Number of Incomplete/Erroneous Reference Ties X 100) Total Reference Ties		

Conjunction Cohesion Ties	Late for School		Aliens	
Total number of Conjunction Cohesion Ties:				
	Total Number	Percentage	Total Number	Percentage
Additive Ties (*and, also, or, or else*)				
Temporal Ties *(then)*				
Causal Ties (*because, so, therefore, otherwise)*				
Number of Adversative Ties (*but, only, though, however, in fact, actually, instead, anyhow*)				
Incomplete/Erroneous Conjunction Cohesion				

APPENDIX D

Procedure for Calculating Elements of Expressive Elaboration

(Ukrainetz & Gillam, 2006; Ukrainetz et al., 2005; Labov, 1972)

Transcribe story into C-units.

Score 0-1-2 for elements that may occur more than once in a story. Sore 0-1 for elements that typically occur once. Sum all of the points.

1. Three major categories of expressive elaboration are appendages, orientations and evaluations. Appendages refer to cues that signify that the listener is listening to a story or that a story has ended (e.g., introducer, abstract, theme, coda, ender). Orientations give background information of the story and the characters beyond a simple setting (e.g., character names, character relations, personality attributes of characters). Evaluations are the ways in which a narrator can convey the narrator's or a character's perspective (e.g., modifiers, expressions, repetition, internal state, dialogue) (Ukrainetz et al., 2005).

Name _____

Elements of Expressive Elaboration Worksheet

Element	***Pretest*** Late for School	**Score 0-1**	***Pretest*** *Aliens*	***Score 0-1***	***Pretest*** One Frog Too Many	***Score 0-1***
Introducer						
Abstract						
Coda						
Ender						
Character names						
Character relations						
External conditions						
Personality						
		Score 0-1-2		**Score 0-1-2**		**Score 0-1-2**
Modifiers (Write all modifiers but score only interesting ones. Uninteresting include: some, other, one, little , big, bad, on top, outside, behind, after)						
Theme						
Phrases and expressions						
Repetition						
Internal state						
Dialogue (indirect dialogue and "yes" and "no" not counted)						

APPENDIX E

Target Word Vocabulary Test

Name: _____ Date:_____

Question	Response	Points
Example 1: I'm going to say some words and I want you to tell me what each word means. For example, if I said what is a "doctor," you might say, "It's someone who helps people when they are sick or injured."		
Example 2: Let's try one for practice. What does "expensive" mean? 0: A lot of money 1: Something that costs a lot of money		
What does "disobey mean?" (Strega Nona) 0: Something bad. 1: Do something that someone didn't want you to do, not to do what you're told.		
What is an "assistant?" (Strega Nona) 0 point: Like a teacher 1 point: a helper, somebody who helps someone, someone who helps you, someone who is paid to help.		
What does "cure" mean? (Strega Nona) 0 points: To help someone 1 point: To help them take care of their disease, to help someone with their health, to make you not feel sick		
What does discover mean? (Sylvester and the Magic Pebble) 1 point: Find something, found out something		

What does “inquire” mean? (Sylvester and the Magic Pebble) 1 point: To ask		
What does the saying, “The punishment should fit the crime” mean?” (Strega Nona) 1 point: They should have the right punishment. They shouldn’t have a punishment that’s not necessary.		
What is a “hobby.” (Sylvester and the Magic Pebble) 1 point: Something like a task that you like to do, like collecting stamps or painting (two good hobbies)		
What does “escape” mean? 1 point: Get away from something		
What does “valuable” mean? (Flat Stanley) 1 point: Worth a lot of money, something that costs a lot, something that is expensive, something that is cherished		
What does “inflate” mean? (Flat Stanley) 1 point: Like blow something up, like put air in something and it gets bigger		
What does “celebrate” mean? (Flat Stanley) 1 point: To have a party		
What does “clumsy” mean? (Stellaluna) 1 point: Not graceful		
What does “anxious” mean? (Stellaluna) 1 point: worried, can’t wait, scared		
What does “peculiar” mean? (Stellaluna) 1 point: odd, unusual, weird, like you’ve never seen it before		
What is does “unusual” mean? (Sylvester and the Magic Pebble 1: Something that you don’t see very often. Peculiar, weird		

APPENDIX F

Narrative Intervention Procedures: Four Day Framework

Day 1: Book Introduction

Narrative Intervention
5-7 minutes *Preparatory set:* Interventionist helps students link new information with familiar information and to predict what the story will be about. 12-15 minutes *Read aloud/Link story structure:* Interventionist reads the story out loud while highlighting the story structure by referring to visuals. Each week, a new story component will be introduced (e.g., setting, characters, initiating event, internal response, attempt and consequence). Interventionist asks questions throughout reading to monitor student comprehension. 5-7 minutes *Comprehension questions:* Interventionist asks several questions in various levels of abstractness to check for students' comprehension. 1-2 minutes *Wrap-up:* Interventionist reviews the lesson.

Day 2: Practice with Summarizing and Story Concepts

Narrative Intervention

5 minutes

Cloze sentence activity for summarizing story: Interventionist summarizes the story and students take turns identifying specific story parts (e.g., setting, characters etc.).

15-20 minutes

Story concepts: For each story, the interventionist will focus on a concept designed to increase the expressive elaboration and cohesiveness of the story. Concepts will include: (1) Using pronominal reference ties, (2) Providing an introduction for the story (3) Using "glue words" (e.g., and, but, because, so, then) (4) Using causal relationships (5) Using feeling and descriptive words. Activities will allow the students practice in using the concept in made-up stories.

5 minutes

Group retell: Students retell story they just heard and are prompted to incorporate the story components and the weekly concept that they just learned.

1-2 minutes

Wrap-up: Interventionist reviews the lesson.

Day 3: Practice with Summarizing

Narrative Intervention

5-7 minutes

Relevant vocabulary: Interventionist will review vocabulary words that occur in the story. Students will participate in a cloze sentence activity as the interventionist summarizes the story with the words missing.

7 minutes

Concept review: Review weekly microstructure concept and weekly story component: Interventionist will repeat the concept activity from the day before.

7 minutes

Retelling of story: Interventionist models how to retell the story using an episode map and the selected pictures of the story. Students take turns being the "narrator" and retell the story using the episode map and pictures.

5 minutes

Group retelling: Group will retell story with episode map and selected pictures of the story.

1-2 minutes

Wrap-up: Interventionist reviews the lesson.

Day 4: Final Review and Homework

Narrative Intervention

2-4 minutes

Review of story vocabulary: Review vocabulary words discussed in previous lesson. Students make sentences with the words.

20-25 minutes

Puppet show of story: Interventionist models what a narrator does (e.g., tell the story) and what the main characters do during a puppet show (e.g., dialogue). Students take turns being the part of a narrator or a character. They use pictures from the book as a guide in remembering the sequence of events. Emphasis is on the story component of the week.

or

Narrative book: Students make narrative book from pictures of story to take home and share with family.

1-2 minutes

Wrap-up: Interventionist reviews the lesson.

APPENDIX G

Scope and Sequence of Instruction

Days	Macrostructure Concept	Microstructure Concept/Expressive Elaboration
Days 1-4	*Setting and Characters*	Pronominal Reference Ties
Days 5-8	Initiating Event ("Story Starter")	Pronominal Reference Ties
Days 9-12	Initiating Event Problem.	Internal States. Descriptive Words. Causal Relationships.
Days 13-16	Problem and Solution.	Internal States. Conjunctive Ties ("Glue Words") Introduction
Days 17-22	Review of all concepts	Review of all concepts

APPENDIX H

Narrative Intervention Fidelity Checklist

Lesson 1 – Fidelity Check
Date: March 26_____

Activity	Group 1	Group 2	Group 3	Group 4	Group 5
Introduction*: *Introduce children and teacher. "We are going to be talking about stories and making stories during the next 8 weeks. We will work together in here on Monday, Wednesdays and Fridays at this time to do some activities that are about making stories. We're going to read several stories, talk about them and also act them out with puppets. (show books and puppets)." (2 min)	✓	✓	✓	✓	✓
Preparatory Set – Narrative Ingredients: "Who has made chocolate chip cookies? When you make chocolate chip cookies you need several ingredients like (show ingredients). What happens if you leave out an ingredient?" "Stories are like cookies. They also need certain ingredients. Over the next 8 weeks, we're going to talk about different ingredients that we can use to make up stories. We're going to be talking about parts of a story. Here are all of the parts of a story." *Show the parts of the story and talk about each one*. (5 min)	✓	✓	✓	✓	✓
Preparatory Set – Strega Nona: "We're going to read a book today about a boy who did not follow instructions and something terrible happened. He disobeyed someone and did something that he wasn't supposed to do. "Have you ever done something that your	✓	✓	✓	✓	✓

Activity	Group 1	Group 2	Group 3	Group 4	Group 5
teacher told you not to do? What happened?" "By looking at this book, I know it's about a woman who likes to cook things in a big black pot. What do you think she cooks in her pot?" "The title is called *Strega Nona*. What do you think that means?" "I predict that this book is about a nice woman who cooks for a lot of people. What do you think it is about?" (5 min)					
Read Aloud – Setting and Characters: "We are going to talk about different parts of a story. As I said, stories are made of different ingredients like cookies. The first ingredient we're going to talk about is the "setting." A "setting" describes where and when the story takes place. *Show visual of 'setting.'* "Do you know where this story takes place? Do you think it happened now or a long time ago?" "Another ingredient is the "characters." Show visual of 'characters.' "Characters" are the people or animals that are in the story. "Who do you think the characters are in this book?" Story Starter – Strega Nona hires Anthony 1st Event: Anthony sees Strega Nona making pasta 2nd Event: Anthony tells the townspeople 3rd Event: Strega Nona leaves and Anthony disobeys her and makes pasta in the magic post. The townspeople eat pasta. 4th event: The pasta overflows and floods the town. Solution: Strega Nona returns and stops the pasta post.	✓	✓	✓	✓	✓

Activity	Group 1	Group 2	Group 3	Group 4	Group 5
Ending: Anthony has to eat the pasta. *Read the book, stopping occasionally to check for comprehension; refer to the visuals when the setting and characters are mentioned.* (10 min)					
Comprehension questions 5 minutes 1. "What is the 'setting' of this story?" 2. "Who are the main characters in the story?" 3. "What did Big Anthony do for Strega Nona?" 4. "What did Strega Nona tell Anthony *not* to do?" 5. "Why do you think big Anthony disobeyed Strega Nona?" 6. "What kinds of things did the townspeople and Big Anthony try to do to stop the pasta from overflowing?" 7. What was Anthony's punishment at the end of the book?	✓	✓	✓	✓	✓
Wrap-up Review the parts of the story. Characters and Setting.	✓	✓	✓		

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Vita

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